Presidential Address
ON
MEDICAL EDUCATION IN RELATION TO OBSTETRICS.

Delivered before the Obstetrical Society of London, March 2nd, 1881,

BY J. MATTHEWS DUNCAN, M.D., F.R.C.P. ED.,
PRESIDENT OF THE SOCIETY.

GENTLEMEN,—I have great pleasure in thanking you for the very high honour you have conferred upon me by placing me in this chair, a position which has acquired biennial increments of eminence from the well-deserved renown of the great physicians who have successively occupied it, and not least from that of the last President, Dr. Playfair, the author of valuable laborious monographs, and of a popular text-book, an esteemed teacher, and a famous practitioner. We are grateful to him for the time and labour he has given us, and I can only hope to emulate him in these respects as well as in his urbanity and gentleness.

The best honours in medicine are conferred by professional brethren, our peers, who alone are competent judges, who alone, indeed, know us. But I dare not rate my present position without deeply feeling that proportionate to the honour are the responsibilities and the duties. To take my allotted share in the mere business of this great and prosperous Society is not a heavy undertaking, but the other and less prominent duties of my position are really onerous—to preside, to direct, to encourage, to repress; to do all this in the proper spirit and in a manner that cannot be misinterpreted. I shall try, in reliance on your generosity and kindness and support, to keep unbroken the good reputation, as a Society, which we have hitherto maintained.

This Association has been and continues to be prosperous. Its membership is very numerous, its exchequer well replenished, its meetings well attended; above all, its proceedings are interesting and its annual volume of Transactions replete with valuable matter.

In the proceedings of our ordinary meetings we include addresses, discussions, demonstrations, papers. These last are various in character, narration of experience, curious or rare or instructive cases, new remedies, new instruments, and the results of observation and research. In the Council and in committees, besides the arrangement of business, much useful work is done of a political or semi-political kind; and I shall follow a precedent, which seems a good one, in devoting the few remarks I propose to make to some important and interesting political matters.

This Society has already interfered powerfully, and with advantage to the public interests, in various medico-political affairs, and there are some measures, especially that relating to the education and registration of midwives, which it has already done much to promote. In the present state of the conduct of legislation we can have little hope of success in Parliament, unless we secure the approval and active operation of a Minister of State, and in this we should probably have no difficulty if we could make for the Minister a quiet political bay in the busy and often turbulent session. We do not wish for our affairs the Parliamentary prominence of party questions, and we have no means of quickly convincing our legislators of their very great importance. We have therefore reluctantly to submit to the patient waiting for a more convenient ministerial season, a time of which we at present see no immediate prospect.

Before proceeding, however, I must devote a few sentences to explain the kind of importance to be attached to the political proceedings of this Society. Their place in the first words I address to you might be supposed to indicate that the Society claims for them a position paramount, and this would be a very great mistake. The Society knows well that political interference is a mere accident of public utility arising from the position it has otherwise attained. The great work of this Society is not political. It is not initiated nor fostered by Ministers of State, and it would be fatal to our best interests to wait upon such uncongenial influence. Obstetrics and gynæcology have been advanced to their present eminence and power and usefulness exclusively by the labours of comparatively humble medical men. As it has hitherto been, so in the future it must be. If we look to the gradual progress of our department of medicine, we observe little else than a series of scientific papers bearing the names of our obstetric heroes. A great practitioner distinguished for learning, sagacity, and power may for a time maintain posthumous fame; but for the most part practitioners and practices, books and instruments, have been lost in oblivion. Imperishable remain the small scientific papers that have taught us, and will teach all future medical students, the anatomy of the pelvis, the anatomy of the gravid uterus, the anatomy and physiology of the unimpregnated female, the mechanism of natural delivery, obstetric auscultation, obstetric anæsthesia, the mechanism of unnatural delivery, and others too numerous to mention here. The wisest judges of our Society will pay but scant attention to our political proceedings, and so also will our best members. The basis of our prosperity and greatness is the unobtrusive memoir embodying thought and work, and recording distinct results; and we must admit that such papers are often dreary affairs, as they are languidly read to benches not overfilled. The man who sends us such, generally a young man, must not be discouraged; his paper will command wide recognition, and, although worldly esteem and prosperity are but secondary objects in his view, his good work will be, as long as he lives, an increasing force tending to his promotion in these respects. It is enough to say of him, "He was the author of that." This Society will pay due attention to its political work as it arises, but it must devote its best energies to its scientific work. With the amount and quality of this it may be pleased, even delighted, but it can never be satisfied. Scientific appetite and greed grow with the food supplied. Every new contribution widens the prospect, and increases the demand for yet more.

Much interest has been, and is now, widely expressed and widely felt in the improvement of the medical curriculum, and our department of the profession is indebted to our late president and to Dr. Macnaughton Jones for their enthusiastic advocacy of its claims. With especial force is it insisted that the course of midwifery lectures required by the Corporations is inadequate, and while on this point there is, so far as I know, no difference of opinion, I am sure that, in the whole matter, we have the sympathy of all men of progress. In considering it, the distinction should carefully be maintained between the theoretical and the practical, between what is desirable and what is feasible and attainable; and this is not always done. For instance, it is common to say that from every student there is, or there should be, required evidence of a thorough knowledge of this or of that, and, among others, of midwifery and the diseases of women and of newly born children. Now, it is only a very moderate amount of knowledge that is now or ever will be required, and it is in vain to aim at more. It is not necessary to have experience at examining boards to get assurance of this, for, after more than thirty years of unceasing study and practice, my own knowledge of the subjects is anything but thorough.

It is a moderate amount of elementary knowledge that is required of a candidate for licence, and he is expected, nay, in duty bound, to cultivate it so as to produce the maturity of a good general practitioner. Within a limit of forty lectures it is impossible for the teacher to give a good introduction to the elements of his subject; and yet it is not to be forgotten that the best teacher is he who condenses most successfully—who, knowing what is essential, what is of high importance, fixes on a well-arranged and, if possible, a consecutive series of facts and principles, and carefully indoctrinates his pupils in them. In any other sense a complete course is not desirable. Our lecturers should be neither schoolmasters nor grinders.

The history of teaching surely indicates that in this matter we shall in due time get what we want. If we are true to ourselves and increase the science, room will be found for the teaching of it. Our glorious ancestors, Smellie and William Hunter, taught midwifery and women's diseases from love of, and respect for, the subject, as those teachers do now who give far more than the curriculum requires, and so it will always be. Smellie's and William Hunter's courses were not required by the licensing or analogous boards of

their day, and they probably never reached the length of twenty lectures. We have got far beyond this, having compulsory courses, which in some schools must reach one hundred lectures—compulsory actual practice of students, clinical teaching and lectures, and instruction in instrumental delivery.

In settling what should be our demands in respect to compulsory attendance on lectures, we must consider our position in relation to medicine proper and surgery proper. The solidarity of medicine, surgery, and midwifery is a popular and a true argument, and justifies our claim to equal honour and consideration for the three branches. But while this claim is now at length, thanks to the unaided achievements of obstetric science, undisputed, it does not follow as a consequence that equal time should be allotted to the teaching of the three departments. Medicine and surgery are each larger than our department. They were taught systematically before midwifery; and, as a result of this historical fact, their teaching embraces large and important subjects, such as the doctrines of inflammation and fever and injury, which, though obstetrical as much as they are medical or surgical, yet are not uselessly repeated in courses of midwifery, being left in those older departments of teaching to which ours is an addition.

But the points to be regarded in this somewhat complex subject are not exhausted. Time is short, and we must reflect on the age to which we would have a medical student's education prolonged. The curriculum requires a period of about four years, and is already so filled that more can scarcely be crammed into it. Without an extension of the curriculum to five years, it appears to me vain to hope for a thorough and fair rearrangement of the various times allotted to the various courses; and such an extension is a matter for very full consideration, with a view to the interests, not of students only, but of the State also. It is not a mere mechanical question—so much time available, so much attendance on lectures possible; for it has been widely asserted, and with some show of reason, that our present extended curriculum is a failure, not only not yielding results in proportion to the extension, but producing only increase of cram and dangerous pretence of knowledge. With this view I do not coincide, but it puts in a clear way the evils attendant on attempting too much. When we increase the curriculum, we must consider not only the time available, the age to which the study should be prolonged, but also the digestive power of the average student's mind. The production of pedantry is to be shunned.

As members of this Society we have observed with deep concern those discussions in the Medical Council which relate to the place, in the education of our medical practitioners, accorded to physics and chemistry, and we cannot hesitate to express our sympathy with those who wish for these branches of science a paramount position among the not purely professional. For Greek or Latin, we have no special reason to contend, because the obstetrician or gynæcologist has never occasion to make use of them, unless for some purely literary, not scientific or practical purpose. Although it may well be asked, What interest have the legal guardians of the education of our practitioners in Greek or Latin? it may, on the other hand, be confidently asserted that their place and power in the higher education of all men need no defenders—no supporters. These languages are not necessary for a medical practitioner, and this cannot be said of physics and chemistry. As obstetricians or gynæcologists we can neither comprehend what has been achieved in the past, nor can we have any hope of future progress without the aid of the latter. Latin and Greek may be said truly to have much the same place in higher general education as anatomy has in medical education; for through them pass the roots of our language, our philosophy, our arts, and our sciences. But while high culture cannot exist without Latin and Greek, excellent practitionership, such as the Medical Council has to care for, may flourish without them. Latin and Greek will always be studied by the highest class of medical men, and will always command an equivalent return of power and influence, and even of the gross reward of money. Physics and chemistry must be studied by all good medical men, and knowledge of them is a guarantee of good practitionership.

Were this a proper occasion, I might enter at length on the history and the present bearings of this important matter, but I shall confine myself to a very few historical remarks which may encourage the supporters of what we regard as indisputably the best direction of medical legislation. Even anatomy was once in the insecure and neglected position in which physics and chemistry now are.

Although physics and chemistry are not depreciated or lightly esteemed, their supporters have still to struggle to secure for them their proper place, and medical history points surely to their still further rising importance in medical education. The problem was well understood and the conflict stoutly maintained a century ago, and the too successful ringleader then was the great Stahl, who, while he despised and opposed anatomy, fought ardently against the introduction into medicine of mechanical and dynamical theories, and, upon the whole, Stahl gained the day—that is, he in this matter carried with him the majority of great medical men. Truth, however, is invincible, and in spite of Stahl and his followers, opposition to mechanical, chemical, and dynamical theories has gradually become less and less, till now the whole of the psychical school is extinct or survives in defence of the comparatively very narrow influence of what are now called vitalist doctrines. Of these profound doctrines and of their great supporters we speak only with unqualified respect. Their existence and extensive power as now exercised are in no manner a protest against the great and due influence of physics and chemistry.

So great has been the progress of physical, chemical, and dynamical theories in obstetrics and in the other branches of medicine, in our own days, that it is necessary still further to explain historically the reluctance, even now, to admit their rising power and utility. Most of us here, at least most of those who have even a few grey hairs, and most of the members of our Medical Council, were reared under the potent empire not of Stahl, but of theories more or less exclusively metaphysical like his. Not a few of us imbibed our first lessons in medical science at the feet of the venerated Alison, the greatest medical philosopher of his day; and as we love the memory of the man, we are slow to disparage any part of his teaching. Yet his teaching—that is, what was instilled into us so recently—is already so obsolete in kind, though not antiquated by mere lapse of time, that you will scarcely believe that these are his words:—"When we compare," says he, "the general notions as to medical science which are prevalent at the present day with those which are recapitulated by Dr. Cullen in the Introduction to the last edition of his First Lines as holding their place up to his time in the schools of medicine, the most important observation that occurs to the mind is the present general, although not always avowed, recognition of this principle,—that the phenomena of disease, like all other phenomena of living bodies, belong to a class of facts, and constitute a subject of investigation altogether distinct from those which are presented by any forms or changes of inanimate matter. Dr. Cullen states that 'the mechanical philosophy had been applied (soon after the discovery of the circulation) towards explaining the phenomena of the animal economy, and continued till very lately to be the fashionable mode of reasoning on the subject;' and he very properly admits that it must 'still in some respects continue to be applied,' but he adds that 'it would be easy to show that it neither could, nor ever can be, applied to any great extent in explaining the animal economy.' Now an important step," Alison continues, "has been already made in the progress of medical science, when this proposition has received the general assent of the profession, and when the study of Mechanical Philosophy is recommended to the student of medicine, not as one of the foundations of medical science (with the exception of a few simple applications of its principles in some parts of physiology), but simply as an example of successful investigation. A nearly similar observation may be extended to the subject of Chemistry, for although it be true that all vital actions are attended by, and in part dependent on, a series of continual chemical changes, and although a certain knowledge of chemical principles is therefore required of the physiologist, yet the chemical changes of animated nature are so distinct from those which we produce at pleasure in dead matter, as the stimulation by nerves and the contraction of muscles are distinct from any of the principles and powers of mechanics."

If physics and chemistry were in this slighted state forty years ago, and have now risen to jostle Greek and Latin in their time-honoured places, what may we not expect from the progress of science within another forty years? There is no reasonable doubt of their growing into pre-eminence,

and it is to be hoped that they will not treat rudely the study of these languages, which are the favourites of all that are scholastically disposed. For physics and chemistry we ask no favour, only justice, at the hands of our Medical Council.

The registration of disease is, as you are aware, making great progress in isolated parts of the country, and its universal adoption may be expected in no long time. Before this time comes, imperial legislation may compel it; and it is almost certain that further legislation with a view to prophylaxis will be a valuable fruit of the increased knowledge provided by the system. There are many ways in which such prophylactic legislation may interest us; and it is in the highest degree imperative to prepare for it, and to watch it, so as to have the laws wisely framed for the public good. Puerperal fever will, no doubt, be the chief class of diseases in our department for prophylactic legislation; and it may be expected that we shall be able to give decided testimony as to the value of our plans. Antiseptic cares are already in some parts of Germany required by law or recommended to midwives by those who have a legal right to command them; and it is to be remembered that in that country almost the whole of midwifery is in the hands of midwives.

It is evident that in this country we have been passing through a period of alarm allied to panic, arising from newly acquired knowledge of the greatness of the evil and ignorance of its nature and mode of propagation. This prolonged panic has naturally led to extravagant views and to grave injustice, especially to midwives and to hospitals. Obstetric science is gradually disclosing the nature and prevalence of the diseases classed under the name of puerperal fever, and this work has been done chiefly under the guidance of those antiseptic theories which have produced such grand results in medicine and surgery as well as in midwifery. It is to antiseptic theories also that we owe our most trusted resources in practice—resources whose value is demonstrated beyond all doubt, and which will soon, I believe, be so generally adopted as to command the consideration of those interested in prophylactic legislation.

But I wish, at this early time, to put in a plea for another prophylaxis, the legislative protection from syphilis, especially of women about to be married and of doctors. It is not rare to meet with instances of carelessness on the part of bridegrooms so gross as to merit the imputation of criminality; innocent women being, as a result, infected with syphilis, and thereby killed or maimed for life, and their offspring in a like terrible plight. No doubt such tragedies are sometimes enacted in spite of due care on the part of the husband; but many are the result of culpable thoughtlessness or culpable neglect. Again, in my own medical circle I have lost, through accidental surgical infection with syphilis, several medical brethren whose lives were very valuable. One of them, an accoucheur, did not survive attendance on a syphilitic lying-in woman above a year and a half. Now, it appears to me that such proceedings as the marriage of a man who knows he has recent and active syphilitic disease, should be taken cognisance of by the law, and regarded as a crime not much less grave than manslaughter; and the same is true of such proceedings as that of a lying-in woman who, knowing she has syphilitic sores on her pudendum, fails to warn her accoucheur of the circumstance. Disease and death coming in this deliberately careless way, surely involve not less horrible and heinous criminality than any other offence.

The education of women for the important profession of midwifery has long been carried on, in many quarters in these countries, with more or less completeness, and with very good results. It has been, and is, the custom to give to pupils a course of lectures, and to require practical instruction and some experience, before conferring a diploma or certificate of competency to manage ordinary natural labour and puerperal state. Nearly ten years ago this Society prescribed a modest curriculum for pupil-midwives, and established an examination to test their attainments, with a view to granting a diploma to such as gave satisfaction to the Society's examining board. This good scheme has had an encouraging amount of success, the numbers passing in each year, from 1872 to 1880 inclusive, being 6, 11, 4, 2, 3, 4, 5, 12, 22. But this does not satisfy us. We want a recognised legal position, chiefly registration, for graduates, and we desire a great increase of members taught and seeking our diploma.

In some foreign countries, to which we look as examples for consideration rather than imitation, the education, registration, and regulation of midwives have long been carried on with apparent satisfaction to all parties. You all know the text-books for midwives issued under Government auspices in Germany. I have brought with me the book of the rules of midwifery service in the kingdom of Wurtemberg, issued by authority of the Ministry of the Interior. I also show you the remarkably cheap, handy, and useful obstetric bag which is recommended to midwives in that kingdom. Foreign obstetric conditions are, as I have already said, very different from those of the United Kingdom; and, of course, the Government arrangements are not exactly what we should desire for our country, with its limited employment of midwives, and what we consider the freer spirit of our laws.

Our examination system has recently been extended by the Society empowering its honorary local secretaries to conduct the written examination. This diminishes the expenses of candidates by reducing greatly the number of days spent in London, a single day for *viva voce* examination being now sufficient. That this widening of the area of easy working of our midwifery system is a good proceeding I have no doubt; indeed, the improvement and extension of the practice of ordinary midwifery by women is a most desirable object. Many people still living remember the time when the whole of this practice was in female hands. It was taken from them, not by the other sex because they were male, but in consequence of their superior education and scientific attainments. Science overthrew all the prejudice against man-midwifery, and this was not a small matter; for authority as well as prejudice were at one time so strong on the side of women as to bring Dr. Wertt to be burned at the stake for attending a woman in labour. If women are to be reinstated in the practice of midwifery, whether in unnatural or in natural labour, it is education and science alone that can do it, and women may be sure that these are irresistible. Meantime we are interested only in the extension of women's usefulness in ordinary cases, natural or nearly natural, and our object is to secure for the public a class of such women, reliable because duly qualified. The gain to the greatest number will be considerable, for the service of midwives is, of course, got at a less rate than that of fully educated practitioners, whether male or female. Besides, such fully educated practitioners are gainers, for their time and health are so valuable, and rapidly increasing in value, as to make it a very hard struggle to do full justice to their cases. Everyone knows how necessary patience and long waiting are for the performance of midwifery duty, and no one is proof against the bias given by impulses of time and health. The more extensive employment of midwives will greatly improve the care of the poorest and largest class. Such women are comparatively easily remunerated; they go to their cases unembarrassed by other important and pressing engagements, and they expect, without regard to the nature of the case, to have a stay greatly longer than is anticipated by the fully qualified practitioner. Against advantages there are, no doubt, disadvantages; and here, as in innumerable other difficulties, we make the best attainable compromise.

We have naturally been disappointed at the political delay of our scheme for the education and registration of midwives; but we are not discouraged, because we have no active opposition, and the urgency of the matter is daily increasing. Indeed, if we consider the gradual growth and progress of all such schemes in this country, and the still only partially developed state of our own midwives' arrangements, we may even assume that the delay does not involve loss of time, but will add, when the proper opportunity comes, irresistible force to our appeal to the Government.

We shall, no doubt, carry with us the sympathy—we hope also the active support—of the Medical Council. This medical Parliament, embodying as it does the political knowledge and experience of the profession, will surely do its duty by us, for it has hitherto shown itself wisely zealous for the interests of the public, not hesitating, after due consideration, to go beyond its chartered duties when such interests pointed the course.

The presence in the Council of an obstetric member has never been indispensable, yet always desirable; and the deficiency of such a member has been keenly felt, and, of course, most by us whose interests are especially dear to ourselves. When the education and registration of midwives come within the range of practical politics, we trust an obstetric member or obstetric members will be in the Council

to give aid. On the death of Dr. Hudson your Council seized the opportunity to memorialise the Government with a view to the filling of the vacant place by an obstetrician, and I am happy to tell you we have gained our end, for I have a letter from the Lord President of the Council assuring me that the wishes of the Society will be carried out.

You are all well aware of the preparations that are being diligently carried on for the meeting of the International Medical Congress in this metropolis in August, and no doubt take especial interest in that part of it called the Section of Obstetric Medicine and Surgery. The general and executive committees of the Congress have nominated for this Section a president, vice-presidents, council, and secretaries, embracing a large number of distinguished physicians whose names will certainly command the confidence and respect of our brethren both at home and abroad. When the Section meets, honorary presidents will be elected from among the eminent obstetricians who, we already know, will come to the Congress.

The importance and usefulness of such meetings as this call for no remarks, for their very existence is in itself almost a sufficient demonstration of them. We are living in an epoch of great development of scientific parliaments; and no one dares to predict, though he may rejoice to anticipate, to what good result this will lead. Scientific Societies have flourished in great towns ever since the revival of learning. National scientific meetings have been regularly established only within our own times, or are being established now. But this kind of progress may be said to proceed in a sort of geometrical ratio. Political conferences are of comparatively old date, and have only a remote analogy with the scientific congresses; but the great Industrial Exhibition of 1851 no doubt offers a striking resemblance to our Medical Congress, and it inaugurated an era of international activity laden with many peaceful blessings.

Our own Society was started only twenty years ago; it had no perceptible period of infancy or adolescence, but from the first bore the appearance and produced the fruits of a mature association. Its founders had, in their sound judgment, justly estimated what was wanted, for, accordingly, our Society has supplied the want, and has prospered. It was not enough to have occasional allotted portions of the meetings of the Royal Medico-Chirurgical Society and a few papers in its annual volume of Transactions. Obstetrics and gynæcology had commenced rapidly to grow, not only in bulk but also in philosophic elaboration. The metropolis required monthly meetings devoted entirely to the subject of our practice and study, and this activity is represented not by a few papers of observation in Medico-Chirurgical Transactions, but by an annual obstetrical volume, rich not in mere observation and dogmatism, but also in speculation, experiment, and research. Under the auspices of the British Medical Association we have a great annual national medical congress which, not many years ago, began to have a special obstetric section. But already all this is not enough. Professional brotherhood, the jostling of co-operating intellects, the comparison of results in practice, are increasingly exigent. Meetings in all great towns and national meetings do not supply the demand, and now for the first time a cosmopolitan Obstetric Congress will be held in the greatest city of the world. It is not enough to anticipate or wish for great results of this August meeting. We must contribute to its success according to our opportunity and ability; and everyone of us can contribute something, if only contagious enthusiasm or mere sympathetic bodily presence.

Accoucheurs and gynæcologists are generally styled, or style themselves, physicians; but they are as much surgeons as physicians, and indeed a great authority has recently asserted, *ex cathedrâ*, that they are more surgical than medical. I do not think so, and, curiously enough, the great authority, although President of the Irish College of Surgeons, is himself an illustrious example of the preponderance of the medical element. Truth to tell, our department is like medicine in general, divided into two friendly co-operating camps, the medical and the surgical, and each man is driven into either, or remains mongrel, according to his special genius. Most begin by affecting the simpler, and in many respects easier, line of surgery, but most end with the conviction that they have not the rare surgical genius. At present the strong currents in obstetrics and gynæcology are rushing in the surgical direction, and too strongly so in the opinion of many intelligent observers. But it is foolish to deprecate this progress, and vain to attempt to change it. The unknown laws of the growth of our department of science and practice are not to be bent according to our shortsightedness to suit our views. The present surgical wave is undoubtedly doing good, and we cannot avoid its sweep, although we might wish it were less strong or had its medical equivalent. Accordingly, in the international obstetric programme it will be found that, for this year at least, surgery is paramount, yet not drowning, far less excluding, medicine. There is, indeed, still plenty of sectional time and space for medicine to occupy and reassert its preponderance over surgery. The authorities of the Congress invite you, as well as foreigners, to come forward with such results of observation, experiment, and research as you may have to offer for the consideration of the cosmopolitan assemblage of brethren who will have come for this purpose from all parts of the world. Every student is aware of the considerable differences that exist among the nations in their mode of describing and discussing the same obstetric and gynæcological matters. This is well illustrated by text-books. A German or French manual, even if undoubtedly far superior to an English one, cannot be made by clever translation to take its place. The foreign work does not fit into our literary system, and it proves valuable chiefly by being mentally assimilated by British readers, and thus made part and parcel of our historical British literary development. If the differences among British obstetricians are enough to give a varied interest and instructiveness to our meetings here, how much more of striking and useful variation may we look for in an International Congress? We may expect to get not only original and new instruction, but to be edified by having old things shown us in a new light.

To conclude, gentlemen. While in medical politics this Society is working for the good of others, each member has to consider how he can make the Society itself greater, and himself more useful through it, and his spirit should be that of the happy warrior,

> "Who, if he rise to station of command,
> Rises by open means; and there will stand
> On honourable terms or else retire;
> Who comprehends his trust, and to the same
> Keeps faithful with a singleness of aim;
> And therefore does not stoop, nor lie in wait
> For wealth or honour, or for worldly state;
> Whom they must follow; on whose head must fall,
> Like showers of manna, if they come at all."

HAMMAM R'IRHA, ALGERIA: A WINTER HEALTH-RESORT.

BY G. D. POLLOCK, F.R.C.S. ENG.,
SURGEON IN ORDINARY TO H.R.H. THE PRINCE OF WALES, CONSULTING SURGEON TO ST. GEORGE'S HOSPITAL.

IT may interest many of the readers of THE LANCET to learn something of a warm health-resort in winter, within five days' easy journey of London, which at present is but little known in England, and which affords many advantages to invalids who require or desire something milder and more genial than the climate of an English winter and spring. While passing some few weeks lately in Algiers, I took advantage of fine weather to pay a visit to Hammam R'Irha, celebrated for its hot springs, and their beneficial effects in rheumatism. "The thermal springs of Hammam R'Irha," writes Colonel Playfair,[1] H.B.M. Consul at Algiers, "occupy the site of the ancient Roman city of Aquæ Calidæ, the ruins of which cover the hill-side for a considerable distance." The hotel and bathing establishment at Hammam R'Irha stand some 2000 feet above the sea level, near the summit of a broad face of mountain, looking south. The hot spring rises behind, and several feet above the hotel, on sloping ground running back some distance on the north side of the building. The outflow is constant and abundant. The water is conducted directly to the hotel, through which it flows continuously night and day. The point at which the water issues from its source is some five minutes' walk from the hotel, and may be readily reached by an ascent among the ruins of the old Roman town. The spring is

[1] Handbook for Travellers in Algeria and Tunis, second edition, p. 171. London: John Murray.

covered in, but is left open in front to permit the escape of steam, and for the convenience of taking water from the fountain-head. The visitor may here satisfy his curiosity as to its temperature by dipping in his fingers. A few seconds will convince him that the experiment is sufficient. The temperature is stated to be about 115° Fahr., but as my thermometer was broken I could not verify the exact point. The heat, however, is sufficient to render the water too hot for a bath without a certain reduction of temperature. The supply is sufficient to afford a continuous stream for two swimming-baths, for the use of men and women resident at the hotel, also for private baths, and three large baths for the use of the Arabs. Night or day a hot bath is available at a few minutes' notice, and the rush of water may be continuously heard—not an unpleasant sound in the still night—as it pours from the pipes which discharge their contents into the large swimming-bath chambers. In 1841 the French military authorities established a hospital here for the use of soldiers; and in 1878 a very comfortable hotel, with bathing establishment, was opened for the use of civilians. Mons. Arles-Dufour, the proprietor of this establishment, is under an engagement with the Algerian Government to convert the present hotel into a hospital for civilians, to contain sixty beds, thirty for each sex. This arrangement will be carried out as soon as a new hotel, now in process of building on the higher ground, is ready for the reception of visitors. This hospital is to be devoted to the treatment alone of such cases as are likely to be benefited by the use of the hot baths.

The waters of Hammam R'Irha are, however, of two kinds. 1. The hot spring already mentioned, containing small quantities of sulphates and carbonates of lime and magnesia, &c. 2. A cold and slightly gaseous water used for drinking, containing small proportions of iron, soda, magnesia, &c. Mr. Squire has kindly offered to furnish me with an analysis of both waters, and when completed the results shall be forwarded to THE LANCET.

The Arabs have great faith in the beneficial effects of the hot spring, and have recourse to the baths in various disorders. With them, however, it appears also to be somewhat of a religious ceremony to pay a visit once a year to Hammam R'Irha, and "to wash and be clean." They have the belief that here is the tomb of some "Marabout," a holy man of ancient times, and that the said Marabout still supplies daily 2000 camels to convey the wood necessary to feed the subterranean fires which heat this water, for the physical, as well as spiritual, benefit of the faithful. There are distinct and separate baths for visitors at the hotel; for the Jews an establishment apart from the hotel; and for the Arabs in a building in front and below the hotel. Visitors need fear no annoyance or inconvenience from the latter, though they flock there in numbers. The situation of the present hotel is all one could desire as regards sanitary conditions; the new hotel will stand still higher. Below is the valley of Oued-Djer; through this valley runs a tortuous river. In rainy weather it is a great torrent; at the time of my visit it was but a slight stream. Beyond the valley, on the opposite side of the river, is a range of mountain well clothed with wood. Mountains also on either side—with the remarkable Zakkar—affording to the artist a fine subject for his brush. It is altogether a beautiful outlook, and in spring-time the ground is a carpet of flowers. The ascent to the hotel from the road in the valley is a zigzag right and left; for by no other mode of approach would this height be accessible in a carriage drawn by horses. The hotel affords every comfort to the traveller, or the invalid, that can be desired; and here the sick man finds a climate, and advantages in light and air, which no place in England can ever give in winter, or, indeed, I might add, can be found in any part of Europe. The situation among the mountains, the dryness of the atmosphere and soil, the bright blue sky and glorious warm sun (tropical showers and occasional wet days excepted), the abundance of hot water for bathing—all these combined afford to a certain class of invalids, or delicate persons, a most charming combination: enjoyment waiting on convalescence, to be followed by that consummation, so devoutly to be wished, and sought, and secured—Health!

I would particularly recommend Hammam R'Irha for a winter residence to those who suffer from those chronic forms of rheumatism which defy the attacks of medicine and puzzle the cunning of the experienced prescriber. There is a secret in the atmosphere, or soil, or elevation, or in the action of the baths, or all combined, which, in such a situation, brings health and strength in a comparatively short time, where otherwise months might elapse before an equal amount of benefit would be attained elsewhere. I also think it would be equally beneficial in cases of chronic bronchitis, and especially to those who suffer from damp and cold. Here the invalid is sure of sunshine and warmth, and quite exempt from the frost and cold winds, which are too frequently met with on the south coast of France. Hammam R'Irha offers a change and a charm which many may like to avail themselves of; and as a change, or even temporary residence, in winter, I know of no place offering similar advantages within the same distance and as accessible from London. Visitors should provide themselves with such dress as they would wear in England—light as well as warm clothing. As the sun goes down a great coat is more than a pleasant companion; it is a necessity to the invalid. In the winter evenings a fire is often agreeable, as also in rainy weather, but there are few days in which some amount of out-door exercise cannot be obtained. Light clothing is the rule by day, warm clothing the exception.

Egypt offers many advantages in climate and interesting associations to the invalid traveller in winter; but I doubt whether, as a winter residence and sanatorium, it offers such as are obtainable at Hammam R'Irha. Travelling in Egypt is very costly, and the invalid has to travel a much greater distance to gain the object in view. Hammam R'Irha may be reached through France in five days with comparatively easy travelling. The passenger who leaves London on Thursday morning may see Algiers harbour-lights by Sunday night, and on Monday morning take the train for Bou-Medfa station, where a carriage can be procured, which will deposit him at the hotel at Hammam R'Irha in time for dinner. But a few days may be agreeably passed in Algiers, and advantage of this delay can be taken to secure accommodation at the hotel, as well as the carriage at the station, for those who prefer to travel by rail. Hammam R'Irha is about sixty miles from Algiers. Those who can afford the time, and wish to see something more of the country than a railway train permits, may drive the distance, as I did, in two days.

The idle rambler would probably find himself satisfied with a few days' residence at Hammam R'Irha, but for the invalid, who would shun cold and damp for sun and warmth in winter, this may be made a most enjoyable residence for many weeks. Books can be procured from Algiers; letters and newspapers are daily delivered at 11 A.M.; the post leaves at five, and a telegraph office is attached to the hotel. The walks and rides, though not offering much variety, are sufficient in extent and picturesqueness to satisfy all who find their reward in renovation of health. For those unable to walk much there are verandahs to sit in, and gardens to stroll about, which enable the weaker ones to enjoy the open air without fatigue. A forest of some 1800 acres near the hotel affords a pleasant walk, and no fear of molestation from Arabs or live lions need be entertained. The former are well conducted, and not obtrusive; the latter are now "an unknown quantity" in this part of Africa. The water from the cold spring is pleasant to drink, and an agreeable addition to the vin ordinaire of the table-d'hôte. It is supplied in all the bedrooms, and at meals, without extra charge. With some persons it acts slightly as an aperient, and, as it contains a small percentage of iron, is said to be useful in cases of chlorosis, &c.

Hammam R'Irha affords much that is of interest to the antiquarian. The excavations for the foundations of the new hotel have exposed the walls and basements of many an old Roman house. Stone coffins, corn-mill, and numerous coins have also been found, and are to be placed in a museum to be attached to the future hotel.

The charges at the present hotel are very moderate, nine francs a day for board and lodging. The table-d'hôte is excellent, the bedrooms clean and comfortable, and a spacious glazed-in verandah looking south, with a cheerful drawing-room, make up the internal accommodation.

The railway from Algiers to Oran affords the visitor at Hammam R'Irha a ready mode of seeing much of the country, should inclination direct and health and pocket permit. If he requires further information on this point he cannot do better than consult an interesting book lately published, "The New Playground, or Wanderings in Algeria."[1] As to cost, the journey *viâ* Paris and Marseilles from London to Hammam R'Irha may be put down at £20 for each person travelling first class. Something more must be added if the

[1] By Alex. A. Knox. London: C. Kegan Paul and Co.

traveller rests on his journey. Those who do not object to the sea may go direct to Algiers from London by steamer. The British India boats occupy about ten days in the passage, and on this route a visit to Lisbon is not to be lost sight of, and "is thrown in gratis."

Individually I owe much to the climate of Africa. A severe sufferer from rheumatism in August last I was induced, with kind friends, to pass two months on the south coast of the Mediterranean, and as a result returned in full health and strength to encounter the effects of an almost arctic winter "without let or hindrance." I feel I cannot do a greater service than point to the great advantages of such a climate in winter, in convalescence, or in such conditions as have above been referred to. I would say to all who can afford the time and the cost, "go and do likewise."

Grosvenor-street, W.

TREATMENT OF PLEURISY AND EMPYEMA.

By JOHN E. MORGAN, M.A., M.D. OXON.,

PHYSICIAN TO THE MANCHESTER ROYAL INFIRMARY, AND PROFESSOR OF MEDICINE IN THE VICTORIA UNIVERSITY.

(Concluded from p. 328.)

SUCH, then, is the mode of treatment I have found most efficacious in pleurisy with serous effusion. By means of the spirometer we decide whether or not absorption is going on; if not, paracentesis is performed, and a small quantity of fluid only removed, the patient at the same time being directed to inflate his lungs with compressed air. But we will assume that the disease is empyema, and the pleural sac filled with pus. What, then, must be our treatment? In the first place, how shall we decide whether or not the exudation really is purulent? This question it is impossible to answer with any degree of certainty, unless we make an exploratory puncture. If the temperature be high; if likewise the heat of the skin over the affected side is persistently a degree or more higher than that of the healthy side; if also the skin over the region of the effusion be œdematous,—we shall then have strong grounds for concluding that the exudation is purulent. Still, none of these signs is pathognomonic. An exploratory puncture may readily be made by means of a subcutaneous injection syringe. In this manner we may prove to ocular demonstration whether pus be present or not. If it be present, we shall be merely wasting our time in attempting to get rid of it either by means of the aspirator or syringe. We may withdraw it as often as we please, but it will certainly reaccumulate. So long as it does so, the pulmonary and costal pleuræ are liable to suffer from the corrosive properties of the purulent exudation; while the adhesions, which will inevitably bind down the lung, become week by week more firm and unyielding. Thus, delay in acting energetically is not alone harmless, it is absolutely mischievous. No time should be lost. But how are we to proceed?

In the first place an incision should be made in the fifth or sixth intercostal space, midway between the two ribs, about an inch and a half in length. Into this incision a cannula should be inserted, with a view of keeping the wound open, the cannula being covered with tow steeped in carbolic acid. The aperture ought to be made as near the mammary line as possible. The patient should be directed to lie on his side for about forty-eight hours, in such a position as shall favour the escape of pus from the thorax. At the end of that time the cannula must be withdrawn, and a silver catheter inserted into the wound. A four-ounce exhausting syringe should be attached to the catheter, and with it the remaining portion of the purulent exudation should be thoroughly removed. Unless a syringe or aspirator be used, comparatively little fluid will escape. It will not, in fact, flow out unless the pressure within the pleural sac exceeds the atmospheric pressure without.

For this reason we often find that when the chest is opened, fluid only wells out during expiration. During inspiration not only does the pus cease to flow, but air is liable to be sucked through the orifice. After removing the purulent contents of the thorax, the most effective way of dealing with the suppurating surface of the pleura consists in conveying spray from a Lister spray-producer directly into the chest along a catheter. In this manner the spray diffuses itself through the interior of the thoracic cavity, and seems to act less injuriously on the delicate granulations of the pleura than when fluid in considerable quantities is introduced either by the irrigator or the syringe. Before, however, the spray is directed into the sac, all pus must be entirely removed, and as each syringeful of pus is withdrawn, a solution of carbolic acid must be injected in its place, till all trace of purulent contamination has entirely disappeared. In protracted cases it is very necessary to change the disinfecting lotions as often as we find the one we are using ceases to act beneficially. If carbolic acid be employed for any length of time in large quantities, the urine is liable to assume a dark olive-green colour, which should warn us to discontinue its use. In place of it we may try iodine, in the proportion of half a drachm of the tincture to the ounce of water, or if there be much depression, quinine may be substituted. If the discharge be offensive, a solution of the permanganate of potash answers remarkably well. After the operation, the cannula is usually allowed to remain in the wound for two or three days; it is then removed, and the aperture kept open by means of a small plug of lint steeped in a solution of carbolic acid. The presence of the cannula often occasions considerable pain and discomfort. If there is any tendency in the wound to close to such an extent as not to admit a catheter, it is dilated by means of a sponge pessary.

During the whole treatment the temperature must be closely watched. It should be taken twice daily, and in some cases three or four times. If the lungs generally are healthy, and there is no tuberculous disease, a rise of two or three degrees in the thermometer will almost certainly indicate that pus is collecting in some portion of the pleural sac, and is poisoning the system. If the pus be fetid, four or five degrees Fahrenheit will probably be indicated. Here the plan of treatment by means of silver catheters will be found peculiarly valuable, and we shall likewise discover the advantage of having mastered the physical geography of the pleural sac; for if we are to bring down the temperature we must break down adhesions and liberate the imprisoned receptacles of pus. Traube, who has written very ably on this subject, maintains that whenever it is necessary to have recourse to the radical operation, Nélaton's catheters should be used, because they are softer than any others. In my opinion, it is their softness which renders them unsuitable for the work we now require of them. We cannot by their means release the encapsulated reservoirs of pus. In the literature of this subject we find frequent reference to failures arising from this cause. Thus, Frantzel (in speaking of five cases in which the radical operation was performed by Moutard-Martin, which terminated fatally) observed "in these five cases, the pleural cavity was subdivided into several sacs by false membranes, and these could not be sufficiently cleared out by the rinsings; in consequence of this the pleural sac ichorised." The experience I have had has convinced me that sufficient care is not taken to get rid of the pus thoroughly and completely. I have frequently seen patients treated after the orthodox fashion (a perforated tube being passed through the thorax along which the pus was expected to find a free outlet), apparently make a good recovery. The discharge gradually ceased, the wound closed, and the patient left the hospital nominally well. The cure, however, was not permanent; caseous degenerative changes occurred in the retained pus, tubercular disease was set up, and death supervened after a protracted illness. To prevent such accidents free egress must be found for the pus. In several cases in which the temperature rose rapidly and unexpectedly during treatment, the feverish symptoms were attributed to the presence of pus, which it was impossible to liberate from within. Here a second or even a third opening was made in the thoracic wall, through which the peccant fluid was readily withdrawn. The situation for this outlet being determined by the thermometer. For where there are underlying purulent deposits there the temperature of the superimposed skin will be higher than over the remaining portions of the surface of the chest.

In treating empyema we must never forget that certain products of inflammation are destructive, and incapable of being organised. So long as they remain in the system they will inevitably prove a source of irritation. It should be our constant endeavour to assist in removing these destructive products of inflammation. The bands of fibrin we should also, as far as practicable, break down as they are forming. They contribute largely to that unsightly retrac-

tion of the chest which is so frequent an attendant on protracted cases of empyema. It has been proved to demonstration that the fibrin takes no very active share in the organising process. It cripples the expansion of the lung and binds it down to the ribs. Rindfleisch, in describing the inflammation of serous membranes in cases of pleurisy, observes:—"We must divide the layer of exudation which lies loosely on the serous surface into two strata—an upper one, which consists of fibrin, and a deeper stratum of young connective tissue formed by a proliferation of the connective tissue of the serous membrane. Upon the surface of the serous membrane connective tissue corpuscles appear embedded in a clear matrix, containing mucin, together with which they make up the layer of embryonic tissue. From these cells and matrix the true 'plastic exudation' is really formed, and not, as used erroneously to be supposed, by the fibrin."

I propose, in the next place, to refer to two typical cases, which appear to me to illustrate the preceding remarks. In these cases the difficulties I have discussed were strikingly exemplified, still the results of treatment proved eminently satisfactory. The first is that of a youth named Charles M——, aged nineteen, who was admitted into the Manchester Infirmary under my care on the 19th of February, 1877. At that time he was suffering from multilocular empyema. On two previous occasions he had been an inmate of the infirmary, and three times considerable quantities of purulent fluid had been removed from the right side of the thorax. Soon after his admission he was again tapped, two pints and eight ounces of pus being withdrawn. The chest, however, rapidly refilled, and the condition of the patient became very critical. Though 5 ft. 4 in. in height, his vital capacity was only 70 cubic inches, instead of being about 200 inches, the normal standard for persons of his height. The evening temperature averaged 103°. The pulse ranged from 110 to 120, and the respiration from 40 to 50 in the minute. The urine likewise contained considerable quantities of albumen, and there were signs of amyloid disease about the kidneys and liver. The digestive organs also were in an irritable state. Frequent attacks of sickness and uncontrollable diarrhœa rendered him day by day more prostrate and reduced. I determined, therefore, to have recourse to the radical operation without further delay. In the early part of April an incision was made between the fourth and fifth ribs on the right side in the mammary line. Into this aperture a cannula was inserted, and the pus permitted, as far as possible, to empty itself from the thoracic cavity. The quantity that escaped, however, was comparatively small; and on exploring the interior of the pleural sac with a long bent probe, I discovered that its cavity was intersected by tough fibrous ribbons, which subdivided it into pouches, within which considerable quantities of pus were encapsulated. As the adhesions were of long standing and very tough, it was found impossible to liberate the imprisoned contents of these receptacles with the catheter or probe. It appeared to me, therefore, that the only way of meeting the difficulty was to carry a trocar and cannula completely through the chest. This was done under chloroform by my friend and colleague, Professor Lund. A long trocar and cannula, specially constructed for the operation, were inserted into the chest, through the incision previously made. Whenever resistance was offered to the advance of the cannula, it was overcome by the protrusion of the trocar. In this manner numerous pent-up reservoirs of fetid pus were laid freely open, the instrument at times being diverted from its direct course and forced through the obstructing mass of adhesions which impeded its progress. As the different receptacles were entered large quantities of pus welled out of the anterior aperture of the chest; and when finally the extremity of the instrument was felt at the posterior part of the thorax, the trocar was forced through the ninth intercostal space, about two inches from the corresponding vertebra. The cannula was then withdrawn through the anterior opening, and the trocar, with a piece of perforated gutta-percha tubing threaded through its upper extremity, was carried completely through the chest. The two ends of the tube were then tied together, and the pleural sac daily washed out with a carbolic acid lotion. In this case it was found necessary to make a double opening, with a view of finding free egress for the pus. Unless, however, the case be very chronic and the adhesions exceptionally firm, I prefer breaking down the bands of fibrin and liberating the pus by a single opening.

This was a most tedious and protracted case, and clearly demonstrated the importance of keeping the pleural sac thoroughly clean, and not allowing pus to accumulate or stagnate in any portion of the chest. Over and over again, whenever the temperature rose, the interior of the pleural sac was carefully explored until the particular spot was discovered in which the pus was collected. As soon as this was liberated by the catheter and the source of irritation drawn off, the temperature immediately fell. The case was instructive in other ways also, for whenever the temperature rose only two degrees the patient lost weight, and was unable to take cod-liver oil, from which, when the feverish symptoms were absent, he invariably derived much benefit; albumen also reappeared in the urine, while the diarrhœa and sickness returned. For twelve months the chest was washed out every day. During this time the amount of fluid which the pleural sac was capable of containing was at stated times carefully measured. Immediately after the operation it held four pints and two ounces; but in the course of seven months it did not admit more than eight ounces. In the early part of the treatment the chest was washed out with carbolic acid and water. After a time, however, when the progress of the case seemed slow, tincture of iodine, in the proportion of half a drachm to the ounce of water, was substituted. On other occasions, again, chloride of sodium, quinine, and permanganate of potash were used. The temperature of the lotion employed ranged from 92° to 98°. While the dressing was proceeding a Lister spray-producer was directed upon the thorax, and after the rinsing out of the cavity was completed the spray was directed along a catheter into the pleural sac. During the treatment, likewise, the patient daily inhaled compressed air from Seigel's pneumatic apparatus. From the description I have given of this case it will be admitted that it was one of very great gravity. The remedial measures were perseveringly continued for eighteen months. The patient made an excellent recovery. This was one of three cases of empyema introduced by me to the notice of the Medical Society of Manchester in 1879. The patient then looked muscular and healthy. The difference between the two sides was comparatively insignificant. There was very little retraction. The chest was well developed and freely admitted air into regions which at one time had been rudely perforated by the trocar and cannula. The temperature was normal, the pulse regular and even, and the vital capacity had increased from 70 to 145 cubic inches. When I last saw this patient, some months ago, he informed me that he had completely regained health and strength, and felt sufficiently robust to undertake employment as a striker in an iron foundry, and was able to get through this laborious calling without experiencing any inconvenience or discomfort.

In another case, in which the patient was younger and the disease of shorter duration, the cure also was proportionately less protracted. An errand-boy, named James R——, aged thirteen, was admitted under my care into the Manchester Infirmary on Nov. 6th, 1878. The boy came direct from the fever hospital at Monsall, where he had been invalided with a slight attack of typhoid fever. When he was received at the infirmary the right side was found loaded with pus, and as he seemed well-nigh moribund a free incision was made in the anterior portion of the right side, between the fifth and sixth ribs, by Mr. Frederick Southam. A cannula was inserted into the wound, and the pus permitted to drain away for three days. The thoracic cavity was then explored in the manner I have described, and the chest washed out with a carbolic acid lotion every day, Lister's spray-producer being directed upon the aperture at the same time. In the notes of the case I observe that on several occasions the temperature, which had been nearly normal, suddenly rose to 102° and 103°. When such a rise occurred the cavity was probed with the catheter until a receptacle of pus was discovered and tapped, when the fever immediately ceased. The pulse at the same time became normal, and the appetite returned. In this case the incision into the chest was made on Nov. 6th, and on the 14th of the following February the wound had healed, and the cure was complete. During the whole time the patient daily inhaled compressed air. As the lung expanded he rapidly put on flesh; thus in the early part of November he weighed only 4 st. 6 lb., whereas on the 1st of the following March his weight was 5 st. 12 lb. The vital capacity also, as measured by the spirometer, increased in a corresponding ratio. On Nov. 16th, ten days after the operation, it did not exceed 50 cubic inches; on Jan. 8th he was able to

expire 70 cubic inches; on Feb. 22nd, 79; on March 5th, 88; and three months later, 100 cubic inches. From inquiries I have lately made regarding this boy I find that he is now muscular and robust, and able to take part in such violent games as football and cricket.

In the two examples I have given it will be noted that the patients were young, one being nineteen, the other thirteen years of age, and it will readily be admitted that in the treatment of such a disease as empyema youth is a very potent and valuable ally. It may be said, indeed, that in early life the results of our curative measures will here be peculiarly satisfactory. No pains or care should then be spared, for even though the lung be reduced to an extreme degree of carnification, and though its tissue be hard and airless, and it has ceased to crepitate, still, if once the pressure be fairly taken off, and the lung be placed under favourable conditions for re-expansion, it will respond to our efforts, and once more become pervious to the air. We shall find also that even the non-vascular membranes which have invaded the pleura may, after a time, become vascular, and themselves assist in promoting absorption.

Still, though among the young we shall naturally achieve the greatest amount of success, yet even among older persons many seemingly desperate cases will reward us if we are prepared to bestow upon them the unceasing attention they require. This care must not be grudged. In protracted and anxious cases we shall need all the help we can obtain. That physician will be most successful who can count (as I acknowledge with gratitude was my case) on the loyal support of able assistants, energetic and intelligent clinical clerks, and skilled attentive nurses.

Manchester.

ON RESPIRATORY IRRIGATION: A NEW METHOD OF AFTER-TREATMENT IN EMPYEMA.

BY C. McIVHOR GOYDER, L.R.C.P., M.R.C.S. ENG.,
SENIOR HOUSE-SURGEON, NEWCASTLE-ON-TYNE INFIRMARY.

WHEN an empyema of the lung has been treated by incision with or without the resection of a portion of rib, and the case is treated antiseptically, healing by granulation and adhesion of the two layers of the pleura takes place oftentimes in a satisfactory way, and the case progresses to recovery in a manner leaving nothing to be desired. It as often, and perhaps more frequently, happens that when about two-thirds of the cavity have been obliterated the remaining third is slow to heal, the pleural surface continues daily to discharge a quantity of pus, the patient's health is undermined, and he becomes the subject of thoracic fistula, or the victim of tubercle or of waxy disease. It is hence an important matter to secure the total closure of the pleural interspace, and with such an object in view I venture to suggest the following treatment, which, through the kindness of Dr. Drummond, one of the physicians to this hospital, I have had the opportunity of trying. Some details of the case, so far as it has gone, will be subjoined.

The cavity of an empyema is an abscess cavity, and as such should be drained of its contents. Its walls also should be approximated in order to obtain if possible that secondary union by granulation which the surgeon attempts to obtain in limbs by pressure and careful bandaging. The contents of an empyema should be kept aseptic and the absorption of septic material prevented. Lastly, an empyema should be irrigated in order to wash away stagnant secretions. I am hopeful that these essentials of treatment will be gained by the process to be described.

Whilst dressing the patient referred to I was one day disappointed to find how much pus had accumulated in the pleural cavity on removal of the antiseptic dressings, and I determined to attempt to drain the cavity by placing the patient on the affected side with the wound lowest, at the same time inserting one end of a gutta-percha tube (eighteen inches long and a quarter of an inch in diameter) just within the cavity, and allowing the remainder of the tube to hang vertically downwards through a hole in the mattress, placing the opposite end in a jar of carbolic lotion. I should add that I attached the tube to the side by means of tapes carried round the body. My object was, of course, to prevent the entrance of air into the pleural cavity, and at the same time to drain the contents of the sac by gravitation.

After watching the arrangement for some time, I was surprised to find the level of the fluid in the jar sinking during inspiration, and again rising during expiration; and upon closely watching the continuity of the tube, I found it straighten itself somewhat at every inspiration. The fluid was, in fact, rising and falling during inspiration and expiration respectively. I next placed a piece of glass tubing in the continuity of the tube, near the chest-wall, and replaced the carbolic with Condy's fluid in the jar. I was at once gratified by seeing the pink Condy rushing up and down the pipe at every respiration. Now replacing the jar by a graduated measure, I found that something less than half an ounce of fluid was drawn up at every normal inspiration, and four ounces at every deep inspiration; the same quantities were ejected with corresponding expirations.

We have, then, a method of irrigation of the chest whereby the interior of an empyema is bathed at every respiration—a method which is constant, automatic, and to a certain extent under the control of the patient. The patient's position will ensure drainage by gravitation. The compression of the chest wall by means of a Martin's bandage (a method I have found useful in holding the tube in position), the patient's own weight as he lies on his affected side, and the hydrostatic pressure of a circular water-cushion around the tube, besides adding comfort to the patient, will all tend to produce that approximation of the two pleural surfaces and falling in of the chest wall which is so desirable. Lastly, the constant bathing of the interior of the sac with an antiseptic non-irritating fluid at the temperature of 100° F. ensures asepticity, and at once removes those products of inflammation at the site of their formation. The essentials of treatment before indicated are thus fulfilled.

Without entering into any details of the case in which I have used the above method of irrigation, suffice it to say that this plan was commenced on Dec. 7th, 1880, and has since been continued, with the exception of an occasional night, and is indeed still being used. During the five weeks that have elapsed the patient's temperature has ranged from 99° F. to 100° F., having only twice reached 101° F. He has gained four pounds in weight; he sleeps well, although the irrigation is continually going on. His appetite is good, tongue clean, and skin moist; he has no night sweats, and does not suffer any inconvenience from the process. Meantime the cavity is apparently getting less and the lung expanding. The jar of Condy's fluid is changed hourly. The tube is removed once in the twenty-four hours, and is then well cleansed in carbolic lotion. Upon removal of the tube no fluid of any kind escapes, although the air goes freely in and out of the chest.

The tube is made of stout black rubber such as is used for drainage-tubing, but it is not perforated laterally at all. Upon introducing it gently into the sinus a point is reached where resistance ceases, and where air is heard to rush through it. It is then fastened in by tapes which encircle the body; and when in position the upper opening of the tube should be *flush* with the inner surface of the parietal pleura. A Martin's bandage is then wound round the chest, and is adjusted above and below the tube. The patient is next placed on his affected side, with the tube through a hole in the bed, and between the patient's body and the mattress a ring water-cushion is placed. This renders the patient comfortable, and makes even pressure on his chest-wall. Hot Condy's fluid in the jar completes the arrangement; and the patient having made a full expiration, the free end of the tube is placed in the jar before the patient inspires. When he does so the pink fluid rushes up the tube, and thus air is prevented from gaining access to the chest.

Before concluding this paper, a few points occur to me which I trust may be of interest. The washings from the pleura were for some days set aside and deposited, and in those which were the first results of the process, shreds of lymph were very plentiful, also pus-cells, but at no time have blood-cells been seen. Regarding the mechanism of the process, the chest-walls, by their expansion, seem to create a partial vacuum, and this doubtless is greatly aided by the descent of the diaphragm. Hence the fluid enters during inspiration, and is emitted during expiration. That wall of the empyema formed by the expanding lung is apparently fixed, for were its ex-

pansion the cause of the entrance of fluids during respiration, these would be ejected during inspiration and drawn in during expiration; this is, however, not the case. It appears to me that the diaphragm is the great discomposing agent in these cases, and that were it possible to confine the movements of this muscle, one of the greatest difficulties in the attainment of mechanical rest would be removed.

In the very tranquil breathing of sleep, fluids arise only to the top of the pipe, and I think that however small the tendency, yet the weight of a column of water fourteen or sixteen inches high *does* tend to approximate the roof and floor of an empyematous sac, and that this is an agency for good.

I have noted above that the portion of tube in the chest was not perforated laterally, and I am sure that when these holes in tubes exist, the granulations quickly spring up and enter the perforations, seriously invading the calibre of the pipe. In fact, the granulations lining the sinus grasp the tube so firmly as to effectually prevent the entrance of air into the chest cavity *outside the tube*, and this in a case where a portion of rib has been resected.

As to the fluids with which to irrigate, I found carbolic acid solution (1 to 100) absorbed so quickly as to give rise to black urine in two days. Condy's is a very much pleasanter solution to work with, and the degree of interchange between it and the fluids of the sac is shown by the rapidity with which the solution becomes decolourised. From boracic acid solution I anticipate good results, and there are many other antiseptics of a similarly unirritating nature.

It may be objected that I have written more fully on this subject than the experience of one case can warrant, particularly as in that case irrigation is still *sub judice;* but I shall have accomplished my object if I have in any way pointed out a treatment which may be useful in a class of difficult cases. I should not like to conclude without stating how much I am indebted to Dr. Drummond for his kindness in the above case, nor without expressing a hope that the result may prove satisfactory to his patient.

Newcastle-on-Tyne.

ON FRAENTZEL'S ANTISEPTIC TREATMENT OF EMPYEMA.

BY G. B. FERGUSON, M.D. OXON.,
SURGEON TO THE CHELTENHAM HOSPITAL.

MR. MOXHAY having in THE LANCET of Jan. 15th narrated a case of empyema treated with noteworthy success after Fraentzel's method, as detailed in Ziemssen's Cyclopædia, I would wish to further place on record, to the credit of this method, two cases treated in the Cheltenham Hospital about eighteen months ago.

The first case was that of Annie M——, aged twenty-seven, who was admitted in July, 1879. About a year previously she had had pleurisy, followed by empyema, and had been treated in a great provincial hospital by aspiration, and afterwards by a drainage-tube. Nevertheless the fetid discharge continued, with temporary abatement only, and when first seen by myself she was exhausted and emaciated, was suffering from cough and hectic fever, was reported to be phthisical, and was not expected, at the utmost, to outlast a few weeks. Following Fraentzel's directions, a free incision, three inches long, was forthwith made anteriorly between the sixth and seventh ribs, and forty-five ounces of fetid pus were evacuated. A silver cannula was then inserted between the ribs, large enough to admit at once two No. 8 Jacques's india-rubber catheters. Through one was injected a stream of warm 1 per cent. carbolic lotion, which, with the residual pus, found its way out through the other, and this washing was continued till all was clean and sweet. The case being necessarily in some degree septic, the spray and formal dressings of Lister were omitted in favour of a simple gauze bag of carbolised tow, which was kept closely applied to the side. This washing process with carbolic lotion was continued twice daily for a fortnight; after which an iodine solution (tincture of iodine, two drachms and a half to one pint) was substituted for it and employed once daily. Speedily the discharge, which had already sunk to a drachm or so in a day, became quite insignificant, and the washing fluid from the first returned almost clear. After another month, there being still some trifling oozing, a 5 per cent. solution of common salt was used for washing purposes, and the silver cannula was replaced by a small india-rubber drainage-tube. After three months in all she left, having discarded the drainage-tube and with a nearly healed sinus. Three months after leaving I saw her again with the sinus firmly healed, her cough gone, increased nearly two stone in weight; in brief, perfectly well.

The second case, that of Clara A——, aged seven, admitted soon afterwards under the care of my colleague, Mr. Bennett, was equally satisfactory. Here the history was successively of scarlatina, dropsy, pleurisy, and empyema. The empyema, however, was not allowed to discharge itself, but Fraentzel's method with full Listerian precautions was adopted, and a pint of pus was removed. The twice and afterwards once daily washings were duly continued, and after a month I read in the hospital note book that the discharge had almost ceased. Five months afterwards the same book contains a mention of the firmly healed condition of the resulting sinus and of the perfect restoration of the patient.

I trust I may be right in my surmise that few, if any, institutions in this country have been more prompt than the Cheltenham Hospital to adopt this notable advance in the treatment of empyema.

Cheltenham.

TREATMENT OF EMPYEMA BY IRRIGATION AND ASPIRATION.

BY JOHN LOWE, L.R.C.S.I.

I WOULD like, with your kind permission, to make a few observations on Mr. Moxhay's article on the above subject in THE LANCET of Jan. 15th.

Mr. Moxhay claims priority in this country for treating empyema by aspiration and irrigation with Listerian precautions. I have seen this method practised several times, and I have practised it myself with success in a case of empyema proper. In those cases which I have seen, as well as in the case under my own care, Listerism was observed with most scrupulous precautions, not as in the case which Mr. Moxhay reports, where, I should say, Lister's method was either not fully comprehended, or, to say the least, was most imperfectly carried out. To open a deeply seated abscess in the thorax, and then to irrigate with simple distilled water, some time after with iodine, and subsequently with carbolic acid solution (two grains to the ounce), is manifestly contrary to Mr. Lister's practice. Mr. Lister would have used an antiseptic solution in the first instance, and this is the method I have seen practised so successfully by others, and until we are more enlightened than we are at present, I shall adhere to the practice which common sense dictates. It is a misrepresentation of our most philosophical surgeon's practice to hold that perfect Listerian precautions were observed in the case referred to; nor do I believe that when two grains of carbolic acid to an ounce of water were used there was even an element of probability that such a solution would have any effect upon disease germs.

We occasionally meet cases that recover as quickly without antiseptic precautions as they could with them, and may not Mr. Moxhay's case have been one of these? At any rate, it would, I think, have been better if Mr. Moxhay had described the case with which he had to deal. For instance, the state of the patient's health, whether the collection of purulent matter was circumscribed, how long it existed, and other points of interest which a scientific intelligence would suggest. A circumscribed empyemic abscess existing for a considerable time is hardly likely to cease discharging quickly; nor is it good practice to drain off the whole of the fluid at once in all cases.

Victoria-road, Battersea-park, S.W.

EDWARD GOODEVE MEMORIAL.—The execution of the bust of the late Dr. Goodeve, for the Medical College, Calcutta, has been entrusted to Mr. Geflowski, of Bruton-street. Mr. Geflowski's name is well known in India as a sculptor. The busts of Sir P. L. Cavaguari, Sir Cecil Beadon, Dr. Oldham, Mr. Arthur Grote, and many others, came from his studio.—*Home News.*

DESCRIPTION OF A SERRATED AND CUTTING CAUTERY IN THE OPERATION FOR HÆMORRHOIDS AND PROLAPSUS.

BY HENRY SMITH, F.R.C.S.,
PROFESSOR OF SURGERY IN KING'S COLLEGE, SURGEON TO KING'S COLLEGE HOSPITAL.

I HAVE until somewhat recently whilst performing the operation with the clamp and cautery for hæmorrhoids and prolapsus of the rectum employed the method as detailed in my article in "Holmes's System of Surgery," which consists in seizing and clamping the part to be removed, then excising the free portion by scissors, and subsequently cauterising the cut surface with the hot iron.

During the last year I have reverted to a method somewhat similar to that adopted originally by the late Mr. Cusack of Dublin, and instead of using the scissors for the purpose of removing the growths, I have employed cauteries so constructed that when heated they either cut through the tissues or saw them through at the same time that thorough cauterisation is effected. Mr. Matthews, at my desire, has furnished me with instruments having either a cutting edge or a serrated edge, as here delineated. The blades are set at right

angles to the shaft or nearly parallel with it, according to the fancy of the operator. I employ both the cutting and the serrated cautery, according to the nature of the case. If the tumour or tumours to be removed are very large and vascular I use the latter, as the tissues are divided more slowly, and the cauterisation is more thorough; when the tumours are smaller and less vascular I use the cutting cautery.

I have now employed this method in a large number of cases both in hospital and private, and I strongly recommend it to those who practise this operation; time is saved, there is no need for the use of scissors, and, so far as my observation serves, there is a more thorough cauterisation effected—the cardinal point in this now safe and simple method of removing radically these serious and troublesome maladies.

I may mention also that these cauteries may be used with advantage in the removal of other growths besides hæmorrhoidal tumours; thus, for instance, I witnessed my colleague, Mr. Wood, use the heated cautery with the cutting edge in completing the separation of the broad pedicle of an ovarian cyst, which had been previously ligatured, but where a more thorough arrest of bleeding was required.

Wimpole street, W.

TESTIMONIAL.—A testimonial was presented on Feb. 23rd to Mr. Edward Charles Cripps, M.R.C.S., L.R.C.P. Lond., of Cirencester, by the officials and patients of the Highgate Infirmary, on his resigning the post of Assistant Resident Medical Officer, which he held for a period of two years. It consisted of a handsome clock and salver; the clock bearing the following inscription: "This clock, with a salver, was presented to Mr. Edward Charles Cripps, by the officers, nurses, servants, and patients of the Highgate Infirmary, as a token of their esteem on the occasion of his resigning the post of Assistant Medical Officer at that institution. Feb. 23rd, 1881."

THE CASE OF PROBABLE POISONING BY COLCHICUM.

BY CHRISTIAN BUDD, M.B. CANTAB.

IN August last a gentleman, about fifty years of age, in good health, but subject to attacks of gout, went to Scotland for the shooting. Whilst there he had a slight attack of gout in his knee, which prevented him from walking, and at the end of ten days, in consequence of feeling unwell, he returned to Devonshire, where he arrived on a Saturday. On the following day (Sunday) he complained of nausea, with griping pains in the belly and diarrhœa. On the Monday he was seized with vomiting, and the diarrhœa continuing, a neighbouring medical man was called in. I imagine the usual remedies for arresting the diarrhœa and vomiting were had recourse to, without, however, in any material way mitigating the symptoms. The vomiting and diarrhœa continued throughout the week, and nothing remained on the stomach. On Tuesday, in the following week, another medical man was called in, and from that date I have an accurate record of the symptoms. At that time the patient lay in a state of semi-stupor, but, when roused, answered all questions clearly. There was not then, nor at any time, headache or delirium. The diarrhœa had ceased from the preceding night, but the vomiting was persistent, with frequent hiccough, and the belly was slightly tympanitic. The pulse was 80 to 82, and regular; the respiration natural; the temperature 96·5°. Upon examination the urine was found to contain some lithates, with a trace of albumen. To these symptoms were now added constant twitchings of the muscles, greatly aggravated by any movement. This state of things continued until Saturday night, when the vomiting ceased, but the patient's condition had become so alarming that, early on Sunday morning, I was called in consultation. On my arrival I found the patient in a state of semi-stupor, with his eyes shut, but when spoken to he answered questions clearly. His tongue and mouth were dry and brown, and he had frequent hiccough. The vomit of the preceding night contained dark-coloured flakes, as if stained with altered blood. The belly was tympanitic, and the bladder had ceased to act, so that he himself desired the catheter to be passed. This was done, and about a pint of apparently natural urine drawn off. The operation was repeated at regular intervals, as from that time he could pass no water without the aid of the instrument. The pulse remained at 80 to 82, and was regular, the respiration natural, and the temperature 96°. The twitchings of the muscles had increased, so that he had little control over their movements. As the bowels had not been moved for six days, a turpentine enema was administered, and was followed by two or three evacuations. On the following morning (Monday), in addition to the symptoms described above, he had paralysis of both arms; that of the left was complete, but he had still some little power in the right, and an effort to grasp one's hand brought on convulsive movements in it. On the Tuesday he was much in the same state; but on the Wednesday the pulse had become intermittent, the temperature had fallen to 95·5°, the twitchings were incessant, he had several involuntary motions, and at 10.45 P.M. he died comatose.

To what cause is this remarkable group of symptoms to be attributed? First, nausea, griping pains in the belly, diarrhœa, vomiting, and hiccough; then stupor, convulsive twitchings of the muscles, and, finally, paralysis and death. To my mind they resemble those of no ordinary malady, but are such as would be produced by an acrid narcotic poison; and it occurred to me whether, being gouty, the patient might not, accidentally or otherwise, have taken an overdose of colchicum. Upon inquiry I elicited from himself that he had been in the habit of taking "pills;" and that whilst in Scotland, to get rid of the gout in his knee, which interfered with his shooting, he had taken six pills daily until he he had finished two whole boxes of them. I have been unable to ascertain what sized box he took into Scotland with him; but it seems certain that, at the least, he took in four days and a half twenty-eight pills. I examined a fellow box of these pills and found them as hard as a stone, so that it is probable the pills remained for some length of time undissolved, and accumulated in the stomach and bowels until the dose may have become a poisonous one. I have since received from

a medical man of eminence a report of a case of accidental poisoning by colchicum in which the symptoms were identical with those of my patient, and ended, in about the same length of time, in paralysis and death.

P.S.—Since the above was written I have received from my friend, Mr. A. Wynter Blyth, the Devon county analyst, an analysis of these pills, from which it appears that twenty-eight of them contain more colchicum than has in recorded cases caused death.

North Tawton, Devon.

NOTES OF A CASE IN WHICH THE PRINCIPAL SYMPTOM WAS A CONSTANT AND COPIOUS DISCHARGE OF WATERY FLUID FROM THE NOSE.

By W. R. SPEIRS, M.B. & C.M.

HAVING observed in the Clinical Society's Transactions for 1879 a case reported by Sir James Paget, in which the principal symptom—a continuous dropping of watery fluid from the nostril—is there described by him as one of great rarity, the following note of a similar case which occurred in my practice may not be without interest.

In November, 1875, T. R——, aged fifty-five, a tailor, of medium height, spare and delicate-looking, consulted me as to a constant dropping of a clear watery fluid from his nose, which was at times so copious that any garment he was making became completely saturated in a very short time. This, he said, had been going on for nearly a month, and he was at length obliged to give up his work and seek advice. It commenced at first with sneezing, which he was inclined to attribute to the inhalation of dust arising from some coarse flannel upon which he was employed in making jackets for pitmen. Change of work, however, made no difference in the discharge, which went on as before. He could give no account of any injury received previously, and there was neither pain nor swelling at any time during the continuance of the flow. It came drop by drop, but at times almost so quickly as to form a stream; and on one occasion, when I wanted some of the fluid for examination, an egg-cup containing nearly an ounce was filled in a quarter of an hour. I have no note of the sp. gr. of the fluid, but it was perfectly clear and colourless, free from smell, and, according to the patient, had no taste. It contained no albumen, and a handkerchief thoroughly saturated with the discharge, on being held to the fire and dried, felt as soft and free from any stiffening as one that had not been used. No excoriation of the lip was produced, no matter how long the discharge was allowed to run over it. At night the patient was compelled to have his head raised till he was almost in a sitting posture, as when lying down the fluid ran back into his throat and caused a choking sensation. He noticed that the flow abated in some degree, but never quite ceased, when he took exercise in the open air, more especially if the atmosphere was clear and frosty, but immediately on coming in doors and entering a warm room it assumed its previous proportions. The sense of smell is now perfect, and was at no time during the flow in any way interfered with. In this case, as in Sir James Paget's, there was no appearance of disease in the mucous membrane of the nostril, and nothing whatever to indicate the source of the fluid. For nearly nine months the flow continued almost uniformly, certainly without any very decided variation in quantity, in spite of all the treatment adopted. This consisted of glycerine of tannin, tannic acid in powder, and various other astringents locally, whilst the general treatment aimed at acting on the lower bowel by purgatives in the way of counter-irritation. Liquid extract of ergot and liquor strychniæ were also persevered with for some time; but the case was finally cured (or, at any rate, the dropping ceased gradually day by day, until within a week it had quite disappeared) by keeping the nostrils always filled with goose-grease. Whether in this case the fluid came from the antrum, as post-mortem examination proved it to do in the case recorded by Sir James Paget, of course I cannot say, but presuming that the cases were identical, is it possible that the goose-grease which the patient himself applied experimentally filled up the fissure of communication between the antrum and middle meatus of the nose, and thereby so altered the existing condition of the structure lining that cavity as to effect a cessation of the excessive secretion? This appears to me to be a reasonable explanation of the result, and quite as satisfactory therapeutically as the treatment adopted by Sir Benjamin Brodie, whose case is referred to in Sir James Paget's report, which consisted of injection of solution of sulphate of zinc (three grains to an ounce) into the nostril, while the salt was at the same time administered internally. In the case referred to there were two separate attacks, and, considering that the second lasted twenty-three months presumably under the above treatment, it cannot be considered very satisfactory. Looking at the case anatomically, injection of solution of sulphate of zinc, or any other fluid, into the nostril, could not exert much, if any, influence over the lining membrane of the antrum.

The following therapeutic note in connexion with my patient may be worthy of record:—For twenty seven years he suffered martyrdom from piles. He underwent an operation at the hands of a London hospital surgeon without benefit, but has been at length completely relieved from all pain and discomfort attending that condition by steadily persevering with glycerine in drachm doses twice daily, which I prescribed for him about three months ago, after seeing it recommended for that purpose by Dr. Young, of Florence, in the *Practitioner* for January, 1878.

Haltwhistle.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

HYSTERO-EPILEPSY; PHASES LIKE THOSE DESCRIBED BY CHARCOT; OBSTRUCTIVE DYSMENORRHŒA; TREATMENT BY DILATATION OF CERVIX UTERI.

(Under the care of Dr. SANSOM.)

FOR the following notes we are indebted to Mr. G. T. Stonham, house-physician.

The patient, a fairly intelligent girl, a Roman Catholic, aged twenty-one, was admitted on Aug. 20th, 1880. She lived from the age of thirteen to seventeen in Canada. Her mother's father died of consumption, but there was no neurotic family history. As a child she had good health, but whilst in Canada, and even after, she had suffered much from headaches, and from frequent attacks of vomiting. She first menstruated at the age of eleven; had always been very irregular; her menses were scanty, lasting never more than three days, and always accompanied by severe pain, both constant and paroxysmal, referred vaguely to the back and to the front of the abdomen, and coming on at the commencement of the flow, and lasting till it ceased.

She was first taken with fits in April, 1880, in which she lay for about five minutes in a rigid condition, and with her eyes shut. She at the same time had great impairment of memory. These fits came on about once a day on an average till the middle of July, when they became much more frequent, and of a more violent character.

She had five fits on the first day of admission, lasting from a quarter of an hour to an hour, and several similar fits on many days following. A fit could at any time be excited by pressure on the ovaries, and during its manifestation pressure on the ovaries would either arrest it or alter its character. Pressure on other parts of the body did not produce a fit. They were most frequent about the time of a menstrual period, and she also seemed to be more liable to them after being visited by the priest. Between the fits she seemed cheerful and intelligent, but suffered a good deal at times from headache, which, she said, felt as "though nails were being hammered into her head."

The fit consisted of a series of stages:—1. They began by her head being thrown up, and inclined slightly to the

right, while her eyes were turned up and to the right, and her mouth widely open. Her limbs were placed in a position approaching that of crucifixion, her legs extended and lying together, while her arms were held out straight nearly at right angles to the trunk, her fingers being over-extended, bent back towards the dorsum of the hand. 2. After lying quite still in this position for a short time she began to make lateral and to-and-fro movements with the tongue, and to froth at the mouth (she never bit her tongue). Her head began to move slightly from side to side, then more violently, till at last her whole body was implicated in a violent side-to-side movement. 3. These movements were soon exchanged for violent and extreme extension and flexion of the trunk: at one moment she bent forwards so that her head almost touched her feet; the next, threw her head violently back on to the bed. 4. She then again assumed the crucifixion position, and on some occasions arched her back in a rigid opisthotonos. 5. Finally, she drew several long breaths, her limbs relaxed, and she turned on to her left side, placed her hand over her heart, and began to cry; she then sat up, smiled, and said she felt tired and weak. During the fit the corneæ were insensitive, and pricking her with a pin caused her no pain in any part of the body.

Treatment was directed to the relief of the dysmenorrhœa, which Dr. Herman considered to be due to a narrow cervix. On Sept. 27th bougies Nos. 4 and 5 were passed; their passage excited a fit. On Oct. 5th bougies Nos. 6, 7, and 8 were passed; a fit again occurred. On Oct. 18th bougies Nos. 8, 9, and 10 were passed; a fit occurred afterwards. She at the same time took one grain of valerianate of zinc three times a day. Her fits soon began to diminish in frequency, till by the middle of October she did not have more than two a week. Her menstruation also became easier, and the pain was much lessened. Pressure on the ovaries produced much less effect. She menstruated on Nov. 30th and Dec. 1st without pain for the first time in her life. She had no fits after that, and when she left the hospital on Dec. 7th she had not had a fit for more than a month.

WEST LONDON HOSPITAL.

INJURY TO THE HEAD; PARALYSIS OF THE SAME SIDE; DEATH; SARCOMA IN CEREBRUM; REMARKS.

(Under the care of Mr. COOPER.)

FOR the following notes we are indebted to Mr. Sidney H. Lindeman, house-surgeon.

Thomas J——, aged forty-seven, was admitted on October 1st, 1880, suffering from the effects of a kick from a horse, on the left side of the face. He was sallow and thin, but not emaciated. He was quite unconscious, breathing deeply, but freely. Pupils equal. The left side of the face was smashed in. There were two lacerated wounds of the left cheek about one inch and a half in length, one above the other, running almost horizontally across the face. Through the upper one the malar bone could be felt fractured, the lower wound exposing the superior maxillary bone. Both eyes were ecchymosed, the left most extensively. After being in bed a short time, the right side of the body was convulsed, the left remaining quite motionless.

Oct. 2nd.—Still unconscious. There had been no movement of the left side, but the convulsions of the right side were so violent that, in order to keep the clothes on, the ankle and wrist had to be secured to the bed. Had groaned loudly, and with great difficulty was made to swallow some fluids. Left side of the face paralysed. Wounds looking healthy. 3rd.—Since admission his bowels had acted, and his bladder had emptied involuntarily. Consciousness returning. Right side movements not so strong. On the 4th he spoke indistinctly. Breathing loud and difficult. Sore forming over the sacrum. Had not moved the left side. Next day he answered questions. Complained of thirst. Tongue dry and furred. Mouth parched. Could swallow fluids only, and that with difficulty. He remained in the same state with left hemiplegia, left facial paralysis, the involuntary movements of the right side having almost ceased, till on the 10th, when for the first time he was delirious, crying out that he had pain in the back over the sacral sore. He only occasionally shut the left eye, generally sleeping with it open. Micturition and defecation involuntary. Tongue and mouth dry. Teeth covered with sordes. Could not swallow solids. Felt cold. On the 25th he complained of pain in the left arm. He could only just move the left thumb and first finger. There was a large collection of pus over the left heel, which was freely evacuated. Left ankle and knee swollen. On the 29th he had some slight control over the bladder, but none over the bowels.

On Nov. 1st, one month since admission, he had a vacant stare, the left eyeball being apparently more prominent than the right. Had complete hemiplegia, slept with eyelids only partially closed, but could close them both at will; had now some difficulty in moving the right arm and leg, especially the latter; movements of the left eye more sluggish than the right; can see normally with right, but with the left only objects held directly in front of it. Did not hear with the left ear so well as with the right, both being impaired. Answered questions intelligently, but mistook strangers for relations, and *vice versâ*. On the 5th the right side of the body was found to present the following condition. The leg was constantly being drawn up; the fingers were flexed on the palm of the hand, the hand on the wrist, and the forearm was drawn at a right angle with the arm. These positions were with difficulty overcome and immediately returned to the same state, when the limb was left alone. The patient had no power to straighten them, and could barely move his right arm at all; but the grasp of his right hand was fairly strong. On the 8th had a severe attack of hæmorrhage from the sacral sore. On the 12th the whole body was much emaciated. Had managed to take a small quantity of bread-and-butter; conversed rationally, and requested to be allowed to go home and die. He was gradually losing all motion in the right arm and leg. He had only slight power over the bladder, none over the bowel.

The patient became extremely weak, and died on the 14th. The temperature throughout varied from 99° to 102·8° F., the highest being registered at the time he was delirious.

Necropsy.—On removing the skull-cap it was found to have attached to it the membranes over the posterior lobe of the right hemisphere, everywhere else it was healthy. The cause of this attachment was readily shown. In the posterior lobe of the right hemisphere there was found an extremely hard tumour, about the size and shape of a hen's egg. To this the membranes were firmly adherent, forming, with the surface of the tumour, a hard leathery mass. The brain substance in its neighbourhood was softened, and beneath the pia mater, within and around the upper end of the fissure of Rolando, which was a little way in front of it, there was a thin clot. There were adhesions, and lymph effused about the upper extremity of the left parietal convolutions. A microscopic examination of the tumour showed it to be a spindle-celled sarcoma. It was elicited from his friends that for the last four years he had been subject to attacks of pain in the head, and had been constantly under medical treatment. He had never been sufficiently ill to prevent his following his usual employment, nor did he show any symptoms of paralysis. His sight and hearing were perfect. When a child he had a severe fall, and struck his head over the right orbit. He went to work on the day of the fatal accident in apparently good health.

Remarks.—The peculiarity of this case lies in the difficulty of detecting the precise seat of the lesion which caused the symptoms. The blow having been on the left side of the head, it was natural to expect paralysis of the right side, if we omit fracture by *contre-coup*. This may be explained thus. In all probability the cranial tumour in the right hemisphere had been growing some time, producing the pains in the head from which he had constantly suffered. Now, a brain containing anything which destroys its natural resilience would be more likely to receive much graver injuries from such an accident than one which is perfectly healthy. The sudden shock, therefore, from the violent blow on the face caused an extreme degree of concussion of the brain substance, already softened, in the neighbourhood of the tumour, together with a good deal of hæmorrhage into the arachnoid and the brain itself, as was shown by the necropsy. This explains the left hemiplegia. The hæmorrhage was greatest in and around the upper end of the fissure of Rolando, which Dr. Ferrier in his "Localisation of Cerebral Disease" designates as the region in which injuries produce paralysis of the opposite side. And as he has also shown that serious injury to the occipital lobes can be inflicted without giving rise to any subjective symptoms, so we

should not be surprised to find that this tumour had not manifested its existence by anything more definite than headache.

Injuries to the cerebral meninges produce symptoms of irritation of the same side, and in this case the injuries they sustained in the region of the tumour would account for the irregular movements of the right side, observed for some days after his admission. The subsequent paralysis and contractions of this side were probably due to the inflammation having extended to the left side of the longitudinal fissure. The fixation of the left eyeball, and the facial paralysis (which was not well marked), can easily be explained by the supposition that there was some local nerve lesion.

MANCHESTER ROYAL INFIRMARY.

CASE OF HEPATIC ABSCESS.

(Under the care of Dr. WILLIAM ROBERTS and Mr. HEATH.)

FOR the following notes we are indebted to Mr. C. H. Bloxsome, house-surgeon.

Mark H——, aged forty-four, a labourer, was admitted under Dr. William Roberts on Sept. 24th, 1880. The family history was good. When ten years of age the patient had small-pox, but, with that exception, he had always been healthy. Seven years before admission he went to America, where he worked as a labourer in the backwoods; was much exposed to cold and wet, and had a severe attack of diarrhœa, which lasted a fortnight. There was, however, no history of dysentery, although he had occasionally been subject to short attacks of purging, which ceased after a few hours. He had for several years been in the habit of drinking large quantities of whisky. There was no history of syphilis.

About five months before admission patient became aware of a dull aching pain in his right side, followed by a swelling over the region of the liver. He laid up for three weeks, when, being worse, he returned to England, and shortly afterwards became an in-patient at the infirmary.

On admission he had a dusky, sallow complexion, with a careworn expression. He was fairly well nourished, though rather anæmic. In the epigastrium was an immovable tumour, rather tense, though fluctuation could be distinctly made out. There was dulness in the nipple line, extending from the lower border of the fifth rib of the right side to two inches below the costal margin.

On Oct. 26th a puncture was made into the tumour about an inch below the eighth right costal cartilage, and three ounces of very sanious pus were withdrawn by the aspirator.

On Nov. 2nd thirteen ounces of a similar fluid were evacuated in the same manner, giving great relief; and on the 7th the aspirator was again used, six ounces of fluid being withdrawn.

On Nov. 9th he was admitted into the surgical wards under Mr. Heath. Under the carbolic spray an incision an inch in length was made a little to the left of the right nipple line, and below the costal border, and a large-sized drainage-tube was inserted. About eight ounces of thick sanious pus were evacuated, and antiseptic dressing was applied, being fixed by a many-tailed bandage. There was such a large quantity of discharge that the wound was dressed twice daily until the third day, after which it was dressed once daily until the 15th, when a small quantity of eucalyptus and vaseline ointment (1 to 8) spread upon boracic lint was applied, the spray being still used. The quantity of discharge steadily decreasing, the drainage-tube was shortened by degrees until Dec. 8th, when it was discontinued altogether.

On Dec. 15th the spray was given up, the dressing being still applied every alternate day; and on the 21st the wound had completely healed. The patient was discharged Dec. 24th.

The temperature, which had previously been most irregular, varying from 103° F. to 96° F., became rapidly normal after the abscess was opened, and remained so throughout, never rising above 99° F.

THE total sum realised by the Hospital Saturday and Sunday collections in Manchester this year is £5053 13s. 4d. A few contributions not yet returned will, it is hoped, raise the sum to at least the average of former years.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Annual Meeting.—President's Address.

THE annual general meeting of this Society was held at the Society's rooms, 53, Berners-street, on the 1st. inst., the President, J. E. Erichsen, Esq., F.R.S., in the chair. The ballot for officers and Council for the ensuing year was taken, Dr. Legg and Mr. Gant acting as scrutineers. The following Fellows were elected to fill the offices:—President: Dr. Andrew Whyte Barclay. Vice-Presidents: Drs. A. B. Garrod and Habershon, and Messrs. Spencer Wells and Holmes. Treasurers: Dr. C. B. Radcliffe and Mr. Cooper Forster. Secretaries: Dr. R. E. Thompson and Mr. Berkeley Hill. Librarians: Dr. Sieveking and Mr. Hulke. Other members of the Council: Drs. Andrew, Cholmeley, Hilton Fagge, Sydney Ringer, and Reginald Southey, and Messrs. Gant, Langton, Francis Mason, John Morgan, and Alfred Willett.

The balance-sheet, which had been duly audited and previously circulated, was taken as read. In consequence of some unusual outlay, the finances were not as satisfactory as usual, there being a deficit in the income as opposed to the expediture of £70 10s. 6d. The number of new Fellows during the past year was twenty-four, less than the year before, but considerably above the average.

Mr. Holmes, the hon. secretary, read the report of the Council, the adoption of which was moved by Dr. Cholmeley, seconded by Mr. Cowell, and carried *nem. con.*

The PRESIDENT then delivered an address. He said that the meetings of the Society, the excellence of its published Transactions and of its unequalled library, were evidences of its satisfactory position; and as proof of the high estimation in which it was held was the fact that office in it was regarded as the highest distinction the profession could confer. At the same time, he thought its sphere of action might be increased, and that it would be of great advantage if an institution which kept aloof from education and medico-ethical and political questions could be more widely utilised for the investigation of questions of practical moment and importance to the community. He suggested that the inquiry of such subjects might be more frequently undertaken by Committees of the Society. He spoke also of the relation of the Society to the kindred societies, and advocated the scheme which in 1869 was nearly carried into effect of amalgamating or affiliating those societies into one central body, a Royal Academy of Medicine. The financial condition of the Society was not altogether satisfactory; its income was not sufficiently elastic to bear the strain of any unusual expenditure. It would not be possible to reduce the ordinary expenditure without impairing the efficiency of the Library, and he suggested that an annual subscription from non-resident Fellows might reasonably be demanded, the present fee being somewhat inadequate and not in proportion to the privileges derived. Of course, any such change would only have a prospective effect. Mr. Erichsen then proceeded to give a brief sketch of the lives and work of Fellows deceased during the past year. The list comprised the names of Dr. D. Whitaker Cohen, Mr. Thomas Bell, F.R.S., the first legally qualified surgeon who devoted himself specially to dentistry, and whose zoological writings as well as his edition of Gilbert White's "Selborne" were well known; Dr. John Deakin Heaton, of Leeds; Dr. W. Sharpey, F.R.S., whose career and character were admirably portrayed: his wide knowledge "blended with wisdom," his unrivalled powers of exposition, his liberal instinct, and his devotion to medical education and science were dwelt on by the speaker, who knew him well; Dr. O'Connor, Mr. Ed. Amphlett, Dr. J. Pearson Irvine, Dr. Ed. I. Sparks, Dr. Ed. Goodeve, Dr. Geo. Moore, and Sir B. C. Brodie, M.A., Bart., late Professor of Chemistry at Oxford, and an honorary Fellow of the Society. In conclusion, Mr. Erichsen said that he had now to retire from the chair and resign the office which the Society had honoured him two years ago. That honour was one of great distinction to be conferred on a member of our

profession. Few honours are given to our profession from without, and we may be allowed to prize those bestowed by the profession itself. Such honours are some recompense in after life to those who in early life have followed the steep and rugged roads of a professional career, and have not pursued the smiling by-paths which, although they may lead men to fortune, do not lead to fame. To a surgeon there was no honour greater than to be on the roll with the sixteen illustrious surgeons who had preceded him in that chair. For that great honour and distinction he most cordially thanked the Fellows, for he felt most grateful for it.

On the motion of Mr. SPENCER WELLS, seconded by Mr. PICK, a cordial vote of thanks was awarded to Mr. Erichsen for his duties as President and for his address, coupled with the request to allow it to be printed in the Proceedings of the Society.

Mr. MACNAMARA proposed, and Dr. WHIPHAM seconded, a vote of thanks to the retiring Vice-President.—Dr. SILVER proposed, and Mr. B. HILL seconded, a vote of thanks to the retiring Secretary and other officers, which was acknowledged by Mr. Holmes, and the meeting then adjourned.

MEDICAL SOCIETY OF LONDON.

Treatment of Hydrocele.—Removal of Tongue for Cancer.—Treatment of Psoriasis by Turpentine and by Chrysophanic Acid.

AT the meeting of this Society on Feb. 21st, F. J. Gant, Esq., President, in the chair,—

Mr. S. OSBORN read notes of two cases of Hydrocele cured by single Tapping, with the subsequent use of the Galvano-suspension Bandage. The first was a case of hydrocele of the tunica vaginalis, which had been present for seven or eight years; and the second was a case of double encysted hydrocele, present for six years. Both patients were affected with rupture on the same side as the hydrocele, showing a preternatural weakness of the parts in the vicinity. The ages were seventy and sixty-three respectively. After tapping and manipulation the galvanic suspensory bandage was applied. The galvanism was believed not only to cause contraction of the muscular fibres of the scrotum, but to impart a healthy action to the serous sac, aiding absorption. Mr. Osborn recommended a trial of this bandage in other diseases of the testicle, such as varicocele and neuralgia testis. — The PRESIDENT referred to the value of manipulation, which often sufficed to provoke the inflammation necessary for the cure of hydrocele. — Mr. MASON, although he had heard of hydrocele being cured by a single tapping, had only met with one such case in his own practice. — Mr. ROYES BELL had not been satisfied with the plan of a single tapping followed by strapping, which had been much recommended. — Mr. PEARCE GOULD asked if the method advocated by Mr. Osborn produced any injury to the skin.—Dr. GIBBON had seen many failures follow tapping combined with strapping; the best results were obtained by acupuncture. — Dr. DOWSE said if the galvanism kept the scrotum contracted its value might readily be conceived. — The PRESIDENT, in reply to Mr. Gould, said that the age of the patient did not enter into the question of his fitness for radical cure so much as the state of his constitution and the size of the hydrocele.—Mr. OSBORN, in reply, said that contraction of the scrotum was produced and maintained by the galvanic suspensory bandage. Although using it in many cases, it had produced no injury.

The PRESIDENT related a case of Epithelioma of the Tongue; removal by Buccal Operation. A man aged fifty-eight was admitted into the Royal Free Hospital on Dec. 31st, 1880. The growth was of eighteen months' duration, attributed to the irritation of a jagged molar tooth. He was also a great smoker. Last April the growth commenced to rapidly ulcerate, and his strength was much reduced by hæmorrhage. The tongue became enlarged, and a deeply excavated ulcer involved the right and base of the organ. The cancerous infiltration extended in the body of the tongue to the left side. There was considerable pain and tenderness. The submaxillary and upper right cervical glands were large, hard, and tender. Iodide of potassium was given in increasing doses without relief. On January 15th the following operation was performed. An incision was made from the angle of the mouth to the angle of the lower jaw, avoiding the parotid duct and exposing the base of the tongue. The facial artery was twisted, the tongue drawn forwards, and removed by the chain écraseur around the root of the organ, guided by the curve of two aneurism needles, introduced from beneath the tongue upwards in front of the epiglottis. The removal occupied twenty minutes. No hæmorrhage occurred. The buccal incision was closed with harelip pins. The patient made a good recovery from the operation. The submaxillary glands diminished in size, but the concatenate glands remained enlarged. The growth had presented the microscopical character of epithelioma. Both the patient and the tongue were exhibited.

Mr. ROYES BELL brought forward a case of Removal of the Tongue by Nunneley's Operation. The tongue shown was that of a man, aged sixty-nine, who was admitted into King's College Hospital, under the author's care, on Oct. 3rd, 1878, operated upon on Oct. 11th, and discharged on Nov. 13th. There was a large epithelial growth about the centre of the right side of the tongue, which was attended with the usual distressing symptoms. The whole of the disease, and almost the whole of the tongue, was removed by the submental operation. The strong wire loop of an écraseur was passed through the floor of the mouth under the chin, in front of the hyoid bone; the loop was then passed over the back of the tongue, which was drawn forcibly forward by means of a stout string passed through its tissue; the mouth was kept open by means of Mr. W. Rose's gag and the tongue cut off by the écraseur, the removal taking thirty minutes; it was followed by free bleeding, and stopped by tying the arteries in the usual way. This operation goes by the name of the late Mr. Nunneley of Leeds, and is well suited to the case. There are instances where the floor of the mouth being involved, the severer form, styled "Syme's," becomes necessary. —Mr. MASON referred to the importance of thoroughly freeing the tongue in any operation for its removal, and pointed out the unfavourable prognosis in these cases, few of whom lived more than twelve months after.—Dr. CHOLMELEY asked the President whether the patient referred to by him, from whom he had removed the tongue seven years ago, and who was now living, had exhibited any signs of glandular infection previous to operation, for he considered this an important question relative to prognosis.—Mr. OSBORN inquired if it was necessary to remove the whole of the tongue. —Mr. MORRANT BAKER considered the case a most successful one. He advocated a plan of operation adopted by him at St. Bartholomew's Hospital—viz., dividing the organ in the median line from its tip to the epiglottis, which, owing to the anatomy of the part, could be effected with little loss of blood. The advantages of this method consisted in the ease with which the severed parts could be grasped by the écraseur or the cautery applied; and by the mode of freeing the tongue the elimination of the disease was more readily secured. He laid stress on not trusting to the needle behind alone.—Mr. PEARCE GOULD asked Mr. Baker what kind of écraseur he used, and referred to the large proportions of deaths from lobular pneumonia due to the septic effect of sloughing, which frequently follows the operation. — Mr. BAKER said he used whipcord or wire.—The PRESIDENT pointed out the advantages of the écraseur, which injured the vessels more than a single wire would, and thus arrested hæmorrhage. Even did the operation not prolong life, it certainly ameliorated the distressing condition of the patient. In the case referred to by Dr. Cholmeley the cervical glands were not enlarged at the time of the operation, although the submaxillary were somewhat increased.—Mr. ROYES BELL replied.

Dr. RADCLIFFE CROCKER showed a case of General Psoriasis, illustrating the comparative result of Treatment by Turpentine and Chrysophanic Acid. The patient, a man aged forty-six, had never been entirely free from the disease for fourteen years; a soft cancer ten years before was not followed by constitutional disease, and the psoriasis presented the usual typical character of the now specific eruption. The disease was worse in winter; the last attack began in November last. With the exception of the lower part of the face and scalp, the middle of the back between the crest of the ilium and the line of the angles of the scapulæ, and the backs of the thighs, the eruption was so closely distributed that there was scarcely any interval of healthy skin; over the knees and elbows the patches were larger. The treatment adopted was: first swathing him in bandages soaked in oil for four days, to remove the scales;

the left half of the body was then rubbed with half a drachm of chrysophanic acid to one ounce of lard, whilst the right half was rubbed with two drachms of oil of turpentine to one ounce of olive oil. The strength of each preparation was increased every few days, until pure turpentine was applied on the right side, and chrysophanic acid, one drachm to the ounce, was used to the left; and in twelve days from the time this strength was reached the whole eruption on both sides had disappeared with the exception of a few spots on the shoulder. As far as rapidity of action was concerned there did not seem any advantage of one application over the other; there was a little tingling with the turpentine, whilst the chrysophanic acid produced staining of the clothes and skin. Dr. Crocker brought this case forward as an evidence of the success attending a penetrating stimulant to the skin, and believed that any stimulant of that kind was efficacious in removing the eruption of psoriasis; the only internal treatment was an alkaline expectorant, as the man had slight bronchitis, and towards the end some perchloride of iron. No arsenic was given. The case was under treatment thirty-three days.—Dr. DOWSE referred to the advantage of the treatment of psoriasis with india-rubber sheeting, and questioned the safety of turpentine applications.—Dr. GILBART SMITH had had a patient under his care suffering from marked psoriasis, whose previous attack had been treated by numerous methods, india-rubber sheeting among the number. A speedy removal of the eruption followed the daily application of an ointment composed of chrysophanic acid, half drachm to the ounce. A certain amount of conjunctivitis was present while under treatment, but gave no uneasiness.—Dr. GIBBON recommended the use of tar.—Dr. CROCKER replied he had never known strangury occur from the use of turpentine in this way over a large surface.

CLINICAL SOCIETY OF LONDON.

Partial Disease of the Nuclei of Motor Roots of the Fifth Nerves.—Quiescent Scirrhus of Breast.—Erythema and Herpes Iris.

THE ordinary meeting of this Society was held on Feb. 25th, Dr. Althaus, vice-president, in the chair.

Dr. HILTON FAGGE read notes of a case of Paralysis due to partial disease of the Nuclei of the Motor Roots of the Fifth Nerve. W. B——, aged forty-one, was admitted into Guy's Hospital on Oct. 18th, 1880, on account of an inability to close the jaws. He said that three months ago he began to experience difficulty in holding anything tightly between the teeth, and that afterwards he could not bite his food well. The loss of power gradually increased, until three weeks ago he became quite unable to bring his teeth together. He also had difficulty in swallowing, and liquids returned through the nose. The drop of the jaw was still slowly becoming more marked. He was a strong, healthy-looking man, but his expression was vacant, and his features had lost much of their play. This, however, was not due to any defect of the seventh nerves (for he could whistle a tune perfectly well), but to separation of the jaws. When he tried to bring the upper and the lower teeth together he could not do it; the temporal muscles could, in fact, be scarcely felt to contract, and the masseters acted very slightly. The excitability of these muscles to the continuous current was much impaired, and they were obviously wasted. Yet the lateral movements of the lower jaw performed by the external pterygoid muscles were normal. On inspection of the fauces, the soft palate was seen to move symmetrically during inspiration, but the left side of the palatine arch was dropped, and narrower than the right side. It appeared clear, therefore, that the case, which (so far as Dr. Fagge knew) was unique, was one of a partial lesion of the motor nuclei of the fifth nerves, comparable with bulbar paralysis, and with Mr. Hutchinson's "ophthalmoplegia externa;" and, as in the last-named disease, the cause was possibly syphilis, for the man had, twenty years previously, had gonorrhœa and a bubo, and his wife, to whom he had been married nineteen years, was never pregnant. Another noteworthy symptom was the presence of sugar, to the amount of 54·7 grains per ounce, in the urine, which was of specific gravity 1049. He also complained of slight occasional diplopia, and the muscles of the arms and the extensor muscles of the forearms were found to have a diminished capability of reacting both to continuous and to faradaic currents. He was ordered to take one-twelfth of a grain of bichloride of mercury and two grains of iodide of potassium, three times a day. Under this treatment he rapidly improved, and he refused to stay in the hospital after the 5th of November.—Dr. ALTHAUS said that such affection of the motor portion of the fifth nerve was rare; and the question to determine was whether the lesion were basal or central. The singular involvement of the third nerve pointed to the base; whereas the bilateral character of the affection was in favour of its being central. He had seen a case, obviously inflammatory, of bilateral affection of the whole fifth nerve. In that case the pterygoids were paralysed. There was also tinnitus aurium, which he attributed to paralysis of the tensor tympani, it being supplied by the auricular branch of the fifth. There was also paralysis of the palate. Was the pupil affected in Dr. Fagge's case? After section of the fifth nerve in the skull there is contraction of the pupil followed by dilatation, and then sluggishness.—Dr. DOWSE had not much doubt that the disease involved the fifth nerve; but the difficulty in swallowing, &c., seemed to point to involvement of the roots of the vagi and glosso-pharyngeal; and the slight loss of power in the muscles of the forearm was a further indication of the downward extension of the lesion. The condition resembled those due to pachymeningitis or bulbar paralysis.—Dr. POORE thought there was slight deviation of the tongue to the right side. Did the muscles give the degenerative reaction to galvanism or the ordinary reaction to faradaism?—Mr. GODLEE pointed out that the buccinator acted fairly well.—Dr. FAGGE, in reply, said that no increased susceptibility to galvanism was obtained. There was no mention in the report of tinnitus or of the condition of the pupils. He considered the case allied to bulbar paralysis, progressive muscular atrophy, and ophthalmoplegia externa, and that the change involved the nuclei of the motor roots of the fifth nerve.

Mr. J. W. TEALE (of Scarborough) read notes of a case of Quiescent Scirrhus of the Breast. A lady, aged fifty-three, a widow, noticed eleven years ago a small, hard, painful lump in the left breast. The surgeon whom she consulted advised its removal, and Mr. Teale, who saw her soon after, considered it malignant, and gave the same advice. All idea of operation was declined. The tumour gradually increased, becoming adherent to the ribs; the nipple was retracted and then obliterated. Pain, which was often excruciating, was relieved by morphia, taken up to four grains daily, and sleep obtained by chloral in increasing doses up to sixty grains. She became emaciated, feeble, bedridden, and apparently at death's door, living for two years on milk only. Eventually, the chloral having been discontinued, owing to the distressing nervous symptoms to which it gave rise, a gradual change in the symptoms took place. The bodily health began slowly to improve, whilst the tumour began to shrivel, the discharge ceased, and the pain gradually diminished. Mr. Teale reported that during the last five years the patient has remained well and fairly strong, and able to walk some miles daily. She has gradually resumed ordinary diet and modes of living, and takes less than half of a grain of morphia daily, whilst the present condition of the shrivelled breast-tumour was shown by a photograph recently taken, which Mr. Teale exhibited to the Society. Mr. Teale raised the question whether the extremely debilitated condition to which the patient had been reduced, and her enforced low diet, had not determined the retrogression of the disease.—Dr. ALTHAUS said no doubt such cases did occur; they were classed by Nélaton under the head of "retrogressive scirrhus."—Dr. C. T. WILLIAMS, alluding to the fact that chloral was abandoned because of the presence of severe nervous symptoms, asked whether these symptoms were really due to that drug. He had often given large doses without serious effect. An old gentleman of seventy-four, the subject of mitral disease, took half a drachm of chloral every night for six months without a bad symptom. In a case of spasmodic asthma he had given fifteen grains every four, and then every six hours, for fifteen days; the asthma was subdued, but a purpuric rash appeared.—Mr. TEALE said that it seemed to him that the chloral was the cause of the bad symptoms, which disappeared on its being discontinued.—Dr. ALTHAUS had recorded in the Clinical Society's Transactions a case where a patient took as much as 120 to 180 grains in the twenty-four hours, causing total destruction of appetite. The chloral was suddenly stopped without

ill effects; but ultimately the patient recurred to the drug and died.—Dr. FAGGE pointed out the great difficulty there was in chronic cancer of discovering the epithelioid elements; and he had long thought those cases where hard masses or strictures occur—(e.g., in bile-duct or intestine), the disease was really malignant, although the epithelial elements were not visible in the mass itself. The existence of distinct secondary growths often settled the question. The burden of proof lay with those who asserted these were fibrous strictures rather than fibroid cancers.—Mr. GODLEE asked whether the condition of the axillary glands had at all altered.—Mr. WARRINGTON HAWARD said the photograph was suggestive of a long-continued growth which had undergone degeneration. Analogous cases were seen in cancer of the rectum, where the growth often exists a long time, and eventually becomes of fibrous nature. Had the arrest of the disease any relation to the prostration and inanition? His own impression was that it was better not to press food on cancer patients, lest the growth be stimulated. A lady seen by Sir James Paget, suffering from cancer of the breast, and taking very little food in consequence of becoming addicted to morphia, became emaciated and very weak. For two years and a half the cancer gradually ulcerated, until at last only a large open wound was left, showing no tendency to heal, but giving rise to a small quantity of foul discharge. At the end of five years from the commencement, another growth appeared in the opposite breast, which progressed very slowly for about another year. She was still taking morphia, but now began to take also large quantities of brandy. Coincidently with this the growth made rapid progress, infiltrated the skin, invaded the lung and pleura, and led to death. The practical inference was that it is better to starve rather than feed the subjects of malignant disease.—Mr. TEALE, in reply, said in his case the nervous symptoms and prostration disappeared on leaving off the chloral, but the morphia was continued. The symptoms in the case attributed to chloralism were those of incipient insanity. The axillary glands had remained in a perfectly stationary condition. The diagnosis of cancer was confirmed by Mr. Teale of Leeds, who had no doubt as to its nature.

Dr. RADCLIFFE CROCKER described four cases of Erythema or Herpes Iris, one of which had been shown to the Society at a previous meeting, and another was brought to the present meeting to show the scars which sometimes result from this affection. A wax model of a typical case was also exhibited. W. G——, aged twenty-three, a butcher, had suffered from three attacks, and though there was no evidence to show what led to the first attack, which occurred during a voyage to the Cape, subsequently errors in diet aggravated or determined an outbreak. His general health was good, excepting a tendency to constipation. The eruption appeared most abundantly upon the hands and feet, especially the fingers and toes, but other parts of the limbs, and now the lower parts of the trunk were sometimes affected. The lesions were symmetrical, though often one patch was nearly well before the corresponding one on the other limb appeared. Each began as a flat red papule about one-sixteenth of an inch in diameter, with a red areola of about half an inch. Sometimes a pustule appeared on the papule, which ruptured, and a brownish-pink zone appeared round it, and outside that a white one, the patch increasing by the formation of fresh rings varying from white to pink or bluish-red tints, and reaching to about the size of a florin; the rings then broke up, and the patch gradually faded, leaving a purplish-red stain, which lasted for some time. The eruption was attended with burning and itching, but the general health was unaffected. Dr. Crocker alluded to the other varieties of this affection. Thus, in some no central vesicle or pustule was formed, but only a flat papule, which became depressed in the centre, and concentric rings spread from that. On the other hand, there might be a large vesicle, or even bulla, in the centre, with concentric rings of vesicles, which gave rise to the name "herpes iris." The tint of the rings in all varied from white to various pink and bluish shades of red. These variations depended mainly upon the quantity of fluid effused into the tissues. In the child, which attended the meeting, the eruption began as rings of erythema an inch in diameter; in a few days these disappeared simultaneously with an outbreak of bullæ of large size, around which came a ring of vesicles, and the contents becoming purulent these dried into scabs, which left the deep disfiguring scars now visible. Speaking generally, the noticeable features of the affection were: (1) its tendency to recur, especially in the spring and autumn, and often in the same month in any one case; (2) to attack children and young adults of either sex; (3) to develop symmetrically, the hands and feet being especially attacked, though in rare instances it was universal; and, finally, to run its course in a few weeks, apparently uninfluenced by treatment.

Dr. F. TAYLOR read notes of cases of Erythema and Herpes Iris. — CASE 1. A man aged forty, previously in good health, was seized one day while at work with violent sneezing and watering of the eyes, and in the morning found his gums and palate becoming swollen, and could only open his mouth with difficulty. These symptoms subsided in two days and an eruption appeared. It commenced on the left thigh in the form of blisters, to the number of twelve or more, about the size of a shilling piece, containing a watery fluid. The following day it appeared on both legs and arms, and he had at the same time a burning sensation in his feet and pains in the joints. The eruption then spread to the head, face, and trunk, the abdomen being the only part spared. When seen on the eighth day of its appearance the eruption consisted of vesicles and bullæ of various sizes, and for the most part arranged in a circular manner, so as to include an area of comparatively healthy skin as in a ring of blister. Some such rings were formed of six to eight isolated small vesicles with clear contents; others of one continuous bulla of vesication of completely circular form, the contents being then mostly deep pink or purple. In many places the circles had coalesced and formed irregular figures, and some circles and patches measured as much as two inches in diameter. The bullæ were upon a slightly inflamed base. The face was much swollen in the early stage of the eruption. There was no itching, but only a burning sensation on its first appearance. He began rapidly to improve without special treatment. After becoming full of dark sanguineous fluid, the bullæ burst, the secretion drying into a dark scab or leaving an open ulcer. These ulcers were slow in healing, and have left several scars, reproducing more or less accurately the consecutive and ringed shape of the original bullæ. They are numerous on the arms, forearms, thighs, and legs. The duration of the bullous stage was about three weeks, but the healing of the ulcers took much longer. Two years have now elapsed, and there has been no recurrence.—CASE 2. A child aged five months, recently vaccinated. Ten days after the operation the eruption began as pimples on a red surface completely surrounding the vaccination crusts, and, subsequently, spots appeared on the arms, chest, abdomen, and back. The spots or patches were oval or circular, touching each other by their borders, but not running freely together, of bright pink colour, with deeper red, very narrow, more prominent margin. In the centre of many was a bright red spot or pimple, and vesicles formed both in the central papule and at the margin of the patch. The child was seen on three successive days, on the last of which the patches were fading.—CASE 3. A boy aged nine years, who was generally delicate and had suffered from cough and weakness for three months. He presented an eruption on the chest, abdomen, neck, back, and lower extremities, consisting of patches about half an inch in diameter, with a central yellow crust; around this was an elevated ring, and upon this again small vesicles. The vesicles dried up into crusts, and around them formed fresh rings of redness with new vesicles upon them; and their contents, at first serous, became purulent, and then discharged and formed scabs. When the crusts separated the skin beneath them had a brownish stain. The eruption lasted about six months. Dr. Taylor remarked that these might be regarded as three different forms of the disease known as erythema iris, herpes iris, or hydroa; and further defined by Mr. Hutchinson as a vesicular form of erythema multiforme. In the case of the infant it was distinctly a vesicating erythema papulatum, or circinatum; in the boy the vesicular characters were more marked; in the adult (Case 1) the vesicles appeared before the redness, a feature characteristic of hydroa according to Bazin. In the sudden outbreak, spontaneous disappearance, symmetrical distribution, and in the co-existing inflammatory disturbance of the joints, it also resembled cases described as hydroa. The large size of the bullæ would have suggested the name pemphigus, as pemphigus circinatus, or serpiginosus.—Dr. STURGE related a case recently under his care. The patient was a lad six years old, who had been ailing for ten days when first seen. He had a temperature of 102°, and at the end of six days in hospital numerous papules and

vesicles appeared on the legs in the form of rings half an inch in diameter. The patches had a red base, surrounded by a circle of vesicles; in some places a distinct bulla formed. He had also a crop of herpes on the lips, a sore throat (with vesicles on the palate), and an attack of dry pleurisy. He recovered in three weeks.—Dr. C. T. WILLIAMS asked if the vaccination in one of Dr. Taylor's cases had anything to do with the disease.—Dr. B. O'CONNOR said pyrexia was unusual in these cases, and in his experience the rash was not generally symmetrical in the limbs, although often on both sides of the trunk. Herpes iris was rare on the trunk. He asked Dr. Taylor for his experience as to the value of arsenic in pemphigus, and mentioned the case of an infant who had been vaccinated a few months before, escaping the contagion of measles (with which other members of the family were afflicted), but becoming attacked with pemphigus.—Dr. T. C. FOX protested against the confusion existing with regard to the relations between the erythematous and vesicular and bullous affections. The latter were only stages of the erythematous inflammation; and Hebra was right in including the various phases under the head of erythema multiforme. Vesiculation was not common; herpes iris was always met with on the back of the hands and fingers, instep, and front of the knees; and was always combined with herpes facialis. It had a great tendency to recur, especially in the spring and autumn.—Dr. CROCKER, in reply, said symmetry was the rule in these eruptions; although there was often a delay in the appearance of the rash on the opposite side to its first appearance. He did not think any treatment influenced the course of the affection. Fever, especially in children, is a common symptom, but is transitory. He agreed with Dr. Fox that the distinction between the vesicular and erythematous rashes was only one of degree, but he did not think herpes labialis so invariable a concomitant of the vesicular form.—Dr. TAYLOR, in reply, said he did not think the vaccination in one of his cases had anything to do with the erythema. Arsenic did good in some cases of pemphigus; in others it was of no use. He gave it usually in the form of Fowler's solution. He thought the depth of skin affected, as well as the intensity of the inflammation, had much to do with the variety of eruption produced.

The Society then adjourned.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

AT a meeting of this Association held on Wednesday, February 16th, 1881, Mr. THOMAS EDGELOW, President, made a few remarks on taking the chair. After thanking the Fellows for the honour conferred upon him, Mr. Edgelow alluded to the late meeting of the General Council, and stated that the result of its deliberations was the condition and claims of the Dental Register. The conclusions arrived at (were there no hope of obtaining an amendment or repeal of the Act, or a distinct recognition of the status of the *surgeon* practising our specialty in the new Medical Act) could not but be regarded with dismay by all interested in the welfare of the profession. The Dental Act has now so signally failed as a practical measure that its very authors must, one would imagine, be heartily sick of it. It has even proved too comprehensive for them, and a great number of names, withdrawn from the Dental Register at the suggestion of the British Dental Association, are now to be restored triumphantly to the lists. In fact, he regretted to state that of the five thousand and odd names that have been entered on this Register, *one* name alone has been expunged by the Council. It was also settled by counsel's opinion that the Executive and Dental Committees have no power to originate proceedings for the removal of any name from the Register, but that all initiation of proceedings to effect this object must rest with the General Medical Council itself. Another point to which he wished to direct attention was, that only the purely dental qualification was allowed to appear on the Register. As long ago as December, 1878, one of the Fellows of the Association applied formally to have his surgical titles entered, but without effect; and now the refusal was pronounced by counsel to be only in harmony with the Dentists Act, and should contain no reference "to other qualifications or practice in either medicine, surgery, or pharmacy." Thus the Dental Register will be very simply and easily divided into two sections—one containing only the purely dental qualification, the other no qualification appended at all. Thus the surgeons, and those without qualifications of any kind, are to be left indiscriminately mixed up, and the licentiates are to pass as the only true representatives of the qualified profession. But while our Association has never failed to recognise that the licentiate has a distinct advantage over the unqualified practitioner, and while it recognises and strives at the general elevation of the profession that undoubtedly has arisen from the higher state of dental education resulting from the institution by the College of Surgeons of its examination in matters purely dental, its very name and constitution would forbid it to sit down quietly without protesting against such an anomalous state of things. It will now become a matter for the personal consideration of those Fellows of our Association, whether under these circumstances it would not be desirable for them (should they not have done so), to withdraw their names from the Dental Register, and to content themselves with their position on the Medical Register. What action should be taken by this Association at the present juncture will receive the careful consideration of the Council, and whatever form this action may take its action will certainly be to strengthen the bonds already happily existing between ourselves and the medical profession, of which profession we have always claimed to be an integral part; and we shall jealously watch, and to the best of our ability oppose, any action, from whatever source it may emanate, that would seek to loosen ties which we trust and believe will prove to be indissoluble.

Mr. E. T. M. PHILLIPS of Liverpool then brought forward the following cases:—Case 1 showed the models of the mouth of a boy aged fourteen, from whom the two roots of the first right lower molar had been extracted, connected with which was a small cystic tumour, the result of an alveolar abscess. Cases 2 and 3 were examples of supernumerary teeth. Case 4 showed the altered appearance of the upper laterals from enlargement of the basal eminences. Case 5 was a very curious condition occurring in the mouth of a young lady aged fourteen, where, on the left side, the canine and first bicuspid were missing, but were erupted and in normal position on the right. Case 6 was one of rare occurrence, and was an example of the transposition of the canine and first bicuspid. Mr. Phillips thought the explanation of this transposition might be accounted for probably in the early removal of the temporary canine, thus allowing the first bicuspid to come close to the lateral incisor, and that the permanent canine, when erupted, not having room, had descended between the two bicuspids. Case 7 was that of a child aged five, and showed the presence of the supernumerary teeth ranged in regular order with the others in the dental arch, and it was a question which should be considered as the supernumerary ones.

Mr. W. A. N. CATLIN exhibited four upper Incisor Teeth, with absorption of fangs, which were loose, and extracted from the mouth of a young lady, aged only seventeen.

Mr. FRANCIS FOX brought forward an example of a Supernumerary Tooth, removed from the mouth of a boy, aged eight. The tooth was placed in the centre of the upper jaw, in the situation between the two central incisors, which he regarded as somewhat uncommon, and raised the question whether it was a supernumerary tooth in relation to the milk or the permanent dentition. His opinion was that it belonged to the permanent set, as such teeth, when occurring in connexion with the deciduous series, are generally found in the lower jaw.

BEQUESTS AND DONATIONS TO MEDICAL CHARITIES. Miss K. G. Simmie, late of Edinburgh, bequeathed £200 to the Royal Infirmary of that city. Ripley's Hospital, Lancaster, becomes entitled, under the will of Mrs. Ripley, to the residue of the estate, by which the income of the charity will be raised to £12,000 a year. Mr. Charles Hargrave, late of Bayswater, bequeathed £2500 each to the Middlesex and the London Hospitals, £1500 each to St. Thomas's and Charing-cross Hospitals, £1000 to St. George's Hospital, £500 each to the Royal Free, St. Mary's, University College, King's College, Moorfields, Poplar, the London Fever, and the East London Children's Hospitals, and the Margate Sea-bathing Infirmary.

Reviews and Notices of Books.

Atlas of Pathological Anatomy. By Dr. LANCEREAUX and M. LACKERBAUER. Translated by W. S. GREENFIELD, M.D., with additional Plates drawn by Mr. W. HURST. London: J. & A. Churchill. 1880.

ENGLISH medical literature has been singularly deficient in works of the kind to which this volume belongs. The first atlas of morbid anatomy in this country was that of Matthew Baillie, issued in 1799; in 1827 Dr. Bright published, in his admirable "Reports of Medical Cases," many plates of renal and cerebral disease; in 1834 Dr. Hope and in 1835 Sir R. Carswell respectively issued illustrations of morbid anatomy, and of these perhaps Carswell's work remained the best known. From that time until the commencement of their atlas by the New Sydenham Society no similar work has issued from the English press, the costliness of production of such works being a great barrier in the way of their more frequent publication. Pending, then, the publication of a work wholly based upon English material by English artists, we may heartily welcome this translated edition of Lancereaux's well-known atlas, and may thank Dr. Greenfield for having undertaken the task of editing it. He has thought fit to make some additions to the original work, illustrating many conditions, especially in pulmonary disease, which had been inadequately represented by M. Lancereaux. These additions comprise ten plates, executed with his usual fidelity by Mr. W. Hurst, whose drawings, for delicacy and finish, compare very favourably with many of the more highly coloured and somewhat exaggerated productions of the French artist.

A glance through the volume shows us that M. Lancereaux has paid especial attention to conditions often passed over by others. He figures, for instance, lesions of lymphatic glands, kidney, heart, lungs, membranes of brain, muscle, and bone, as well as the gastric and hepatic disorders attributable to alcoholism. Amongst other novelties he represents uræmic gastritis (with pyloric ulceration) and uræmic enteritis; but he only gives one figure—and that not a very good one—of typhoid enteritis, a deficiency which the editor has done well to supplement. The rare form of new growth known as adenoma of the liver is amply illustrated. A specimen of blood containing bacteria (? bacilli) from a case of malignant pustule is represented. We have also figures of the rare condition, almost unique in our experience, of tubercular endocarditis. M. Lancereaux represents a dissection of the cardiac plexuses in a case of angina pectoris, and devotes certain plates to represent the lesions of gout (in which we see he includes one of deposit on the aortic valves) and lead poisoning. On the whole, we think that there are certain defects as well as superfluities in the distinguished French pathologist's work.

Dr. Greenfield has, as we have said, done much to remedy the defects. The illustrations of phthisical changes, of chronic pneumonia, &c., which he gives, admirably supplement the work in the parts where it is most deficient. Other additions include illustrations of organs in Hodgkin's disease and leucocythæmia, as well as drawings of ulceration of the intestines in enteric fever, dysentery, and tuberculosis, scarlatinal nephritis, nutmeg liver, and fungating endocarditis.

In its present form the atlas will supply a long-needed want, and although in some respects (especially in the histological representations, many of which are unworthy of the work) it is still imperfect, it is certain to be much appreciated, and will, we hope, reward the enterprise of those who have undertaken its issue. Should this be the case, we may also look forward to the time when the stores of material accumulated by our own pathologists will receive similar illustration.

Fits, their Diagnosis and Immediate Treatment. By JOHN H. WATERS, M.D. &c., Surgeon to the C Division of the Metropolitan Police. London: J. & A. Churchill. 1879.

THE author has been led to write this little work, not with any idea of giving anything new to the profession, but to set forth the most prominent symptoms of those affections coming under the notice of police surgeons, in which insensibility or convulsions occur. Dr. Waters divides his cases into two tabular divisions: the first, cases of coma in which danger to life is imminent; the second, cases of coma not intense, in which no danger to life is expected to arise. The first division is further subdivided into two classes—(*a*) those in which the symptoms develop suddenly and severely, and where the coma is intense, in this group is included rupture of cerebral aneurism, severe injuries to the head, and sunstroke; (*b*) those in which the symptoms are slower in their advent, with more or less loss of insensibility. This group includes uræmic convulsions, sanguineous apoplexy, embolism, opium poisoning, &c. The second division likewise can be divided into two groups—(*a*) where sensibility is suddenly lost and the patient cannot be roused, and (*b*) where the sensibility is not lost suddenly, and the patient can be roused. In the first group are included epileptic and "excentric" convulsions, in the second alcoholic intoxication. These tables are undoubtedly useful, but experience teaches us that it is impossible to draw a hard-and-fast line in the majority of instances that come under observation, and the difficulty is increased by the case being generally complicated by other conditions.

OUR LIBRARY TABLE.

Midwifery for Midwives. By J. E. BURTON. I... J. and A. Churchill.—This little work is a trans... the Official Handbook of Midwifery for Prussian ... The book was written by Professor Litzman of ... submitted to a committee of experts. The na... author alone is a sufficient guarantee for the ex... the work. It treats the subject fully, and conta... account of the duty of the midwife to the wom... pregnancy, labour, and the lying-in period, as well ... management of the child. Regular or natural l... well and clearly explained, and the means whereby irr... labour can be recognised, and the *duties* of the midwif... all cases, are distinctly stated. We know of no work better suited for midwives than the one before us. We would add that the translator has done his part on the whole well, and has rendered the book into simple and clear English.

Questions on Magnetism and Electricity. By F. W. LEVANDER. London: H. K. Lewis. 1880.—This is a series of questions culled from the papers set at the Preliminary Scientific and First B.Sc. Examination of the University of London. It will doubtless prove of great service to many candidates, not only on account of the *matter*, but for the *manner* also. Many students fail from a want of knowledge of how to put their answers concisely into words, and from a cursory inspection of this little book, Mr. Levander appears to us to have answered the questions at once correctly and concisely.

Atlas of Skin Diseases. By LOUIS A. DUHRING, M.D., Professor of Skin Diseases in the University of Pennsylvania, &c. Part VIII. Philadelphia: J. B. Lippincott and Co. 1880.—We have received the eighth part of this high-class atlas containing, as usual, four plates. Dr. Duhring has here selected for illustration the papular variety of Erythema multiforme as it appears affecting the backs of the hands every spring; a characteristic Tubercular Syphiloderm of the side of the scalp, face, and neck; an example of Nummular and Circinate Psoriasis of the back; and the chronic scaly condition of Tinea tricophytina of the scalp, neck, and face. We have so often expressed our appreciation of the

marked success which has attended Dr. Duhring's efforts and we criticise the plates by so high a standard, that we almost shrink from saying that in Part VIII. there seems to us to be a slight falling off in excellence of execution. The subjects, however, are confessedly difficult. In the well-written letterpress accompanying the plates we see that Dr. Duhring employs the term Herpes iris so as to include all the vesicular varieties of Erythema multiforme.

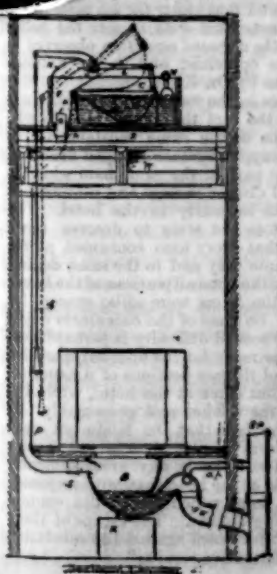
Archives de Neurologie. Edited by MM. CHARCOT and BOURNEVILLE. No. II.—It is not every addition to medical periodical literature which can be welcomed as important and useful, but such is certainly the case with this French journal of Neurology, which fills a distinct want in the medical literature of France. It is to be published quarterly. In the second number, which is before us, there are three original articles: one on Subacute Parenchymatous Neuritis, by M. Gombault; a contribution to the Pathology of Tremor, by MM. Debove and Boudet; and an account of Epileptic Dementia, by MM. Bourneville and D'Olier, with a description of microscopical changes in that condition by M. Brissaud. About sixty pages are occupied by an analysis of recent papers on the Physiology, Pathological Anatomy, Symptoms, and Treatment of Nervous and Mental Diseases.

Note-book of Materia Medica, Pharmacology, and Therapeutics. By R. E. SCORESBY-JACKSON, M.D., F.R.S.E. Fourth Edition, revised and brought down to the present date, by Dr. FRANCIS W. MOINET, Lecturer on Materia Medica [illegible]apeutics, Surgeons' Hall, Edinburgh. Edinburgh: [illegible]nd Stewart.—This well-known book deserves to [illegible]known. It combines the most useful and im- British Pharmacopœia, with therapeutical heartless, but sound and really suggestive erience, and that equally rare quality— action and uses of medicines. We to students and practitioners.

New Inventions.

SBURY VALVELESS WATERCLOSET AND WASTE-PREVENTER.

may be seen in the Parkes Museum at University College a very excellent closet, the invention of Mr. W. White, F.S.A. The great merit of Mr. White's closet seems to us to be its simplicity, and from seeing it in action we are in a position to state that it works effectually. A reference to the woodcut will explain its construction. The basin (*B*) is composed entirely of earthenware, and is fixed upon a block (*x*). The syphon is supplied with an air-pipe (*a p*) going from its highest point, and the discharge is through a curved pipe into the soil-pipe (*s p*). So far there is considerable resemblance between the "Shrewsbury" and Boatel's closet. The water-supply for the closet is from a special cistern (*c*) raised five feet above the basin and filled through a ball-valve (*v*). In the cistern is a receptacle capable of holding two gallons of water, which can be tipped by the action of the levers (*H L*) so as to discharge its contents instantaneously into the funnel (*F*), and through the funnel into the two-inch supply-pipe (*P*). This supply-pipe is furnished with a "spreader," which is fixed exactly opposite the aperture of exit of the basin. The mode of action is simple. The closet having been used, a pull is given to the handle shown in the figure, and instantaneously the two gallons of water rushes violently down the service-pipe and flushes the basin forcibly and effectually. The tip-tray is soon filled again, and a second flush can be given if necessary. The closet has the advantages (1) of being very simple, (2) of having a separate water-cistern, (3) of preventing waste of water, (4) of being efficiently ventilated, and (5) of being moderate in cost.



A NEW PORTABLE STETHOSCOPE.

WE have received from Messrs. Salt and Son, of Birmingham, a portable stethoscope, arranged by Dr. Sutherland. The stethoscope divides into four separate pieces—the ear-piece, the chest-piece, and two hollow rods, forming the tube. These four pieces, when screwed together, form an ordinary stethoscope; when separated, it is intended that the two rods should be inserted transversely through the chest-piece and through the ear-piece, so that the whole stethoscope again appears as one piece, but so flat in shape as to be easily carried in the breast- or tail-pocket of a coat, thus doing away with the usual method of conveying the instrument in the hat. A brief trial of the instrument has proved that although it conducts the cardiac sounds as well as the ordinary stethoscope, it is less useful for pulmonary auscultation. The peculiar construction of the chest-piece necessary for the purpose above described may have some effect on this result. The idea is an ingenious one, and certainly the instrument is portable enough, although, when put together, rather ungainly and clumsy-looking.

EUKNEMIDA BOOT-SOLES.

OUR recent annotation on the subject of boots, and the attention we drew to the fact that the chief source of danger in getting "wet in the feet" was owing to the evaporation from the saturated absorbent sole, have given rise to some suggestions. The patent Euknemida soles are the invention of Mr. W. H. Smith, of High-street, Birmingham. Their mode of preparation is as follows: The soles are soaked in cold water, and are covered on both sides with pure tallow. After an interval of some time they are placed between dies cast to the shape of the sole of the foot, and are then subjected to an hydraulic pressure of 150 tons. This has the effect of rendering the leather exceedingly dense and of saturating it with grease. The cost of the process is small, and we believe the result to be satisfactory. We placed a pair of boots with Euknemida soles in water, so that the soles only should be in contact with the fluid; after fourteen hours' immersion we found that the boots were not in the least damp on the inside, and had not appreciably gained in

Reviews and Notices of Books.

Atlas of Pathological Anatomy. By Dr. LANCEREAUX and M. LACKERBAUER. Translated by W. S. GREENFIELD, M.D., with additional Plates drawn by Mr. W. HURST. London: J. & A. Churchill. 1880.

ENGLISH medical literature has been singularly deficient in works of the kind to which this volume belongs. The first atlas of morbid anatomy in this country was that of Matthew Baillie, issued in 1799; in 1827 Dr. Bright published, in his admirable "Reports of Medical Cases," many plates of renal and cerebral disease; in 1834 Dr. Hope and in 1835 Sir R. Carswell respectively issued illustrations of morbid anatomy, and of these perhaps Carswell's work remained the best known. From that time until the commencement of their atlas by the New Sydenham Society no similar work has issued from the English press, the costliness of production of such works being a great barrier in the way of their more frequent publication. Pending, then, the publication of a work wholly based upon English material by English artists, we may heartily welcome this translated edition of Lancereaux's well-known atlas, and may thank Dr. Greenfield for having undertaken the task of editing it. He has thought fit to make some additions to the original work, illustrating many conditions, especially in pulmonary disease, which had been inadequately represented by M. Lancereaux. These additions comprise ten plates, executed with his usual fidelity by Mr. W. Hurst, whose drawings, for delicacy and finish, compare very favourably with many of the more highly coloured and somewhat exaggerated productions of the French artist.

A glance through the volume shows us that M. Lancereaux has paid especial attention to conditions often passed over by others. He figures, for instance, lesions of lymphatic glands, kidney, heart, lungs, membranes of brain, muscle, and bone, as well as the gastric and hepatic disorders attributable to alcoholism. Amongst other novelties he represents uræmic gastritis (with pyloric ulceration) and uræmic enteritis; but he only gives one figure—and that not a very good one—of typhoid enteritis, a deficiency which the editor has done well to supplement. The rare form of new growth known as adenoma of the liver is amply illustrated. A specimen of blood containing bacteria (? bacilli) from a case of malignant pustule is represented. We have also figures of the rare condition, almost unique in our experience, of tubercular endocarditis. M. Lancereaux represents a dissection of the cardiac plexuses in a case of angina pectoris, and devotes certain plates to represent the lesions of gout (in which we see he includes one of deposit on the aortic valves) and lead poisoning. On the whole, we think that there are certain defects as well as superfluities in the distinguished French pathologist's work.

Dr. Greenfield has, as we have said, done much to remedy the defects. The illustrations of phthisical changes, of chronic pneumonia, &c., which he gives, admirably supplement the work in the parts where it is most deficient. Other additions include illustrations of organs in Hodgkin's disease and leucocythæmia, as well as drawings of ulceration of the intestines in enteric fever, dysentery, and tuberculosis, scarlatinal nephritis, nutmeg liver, and fungating endocarditis.

In its present form the atlas will supply a long-needed want, and although in some respects (especially in the histological representations, many of which are unworthy of the work) it is still imperfect, it is certain to be much appreciated, and will, we hope, reward the enterprise of those who have undertaken its issue. Should this be the case, we may also look forward to the time when the stores of material accumulated by our own pathologists will receive similar illustration.

Fits, their Diagnosis and Immediate Treatment. By JOHN H. WATERS, M.D. &c., Surgeon to the C Division of the Metropolitan Police. London: J. & A. Churchill. 1879.

THE author has been led to write this little work, not with any idea of giving anything new to the profession, but to set forth the most prominent symptoms of those affections coming under the notice of police surgeons, in which insensibility or convulsions occur. Dr. Waters divides his cases into two tabular divisions: the first, cases of coma in which danger to life is imminent; the second, cases of coma not intense, in which no danger to life is expected to arise. The first division is further subdivided into two classes—(*a*) those in which the symptoms develop suddenly and severely, and where the coma is intense, in this group is included rupture of cerebral aneurism, severe injuries to the head, and sunstroke; (*b*) those in which the symptoms are slower in their advent, with more or less loss of insensibility. This group includes uræmic convulsions, sanguineous apoplexy, embolism, opium poisoning, &c. The second division likewise can be divided into two groups—(*a*) where sensibility is suddenly lost and the patient cannot be roused, and (*b*) where the sensibility is not lost suddenly, and the patient can be roused. In the first group are included epileptic and "excentric" convulsions, in the second alcoholic intoxication. These tables are undoubtedly useful, but experience teaches us that it is impossible to draw a hard-and-fast line in the majority of instances that come under observation, and the difficulty is increased by the case being generally complicated by other conditions.

OUR LIBRARY TABLE.

Midwifery for Midwives. By J. E. BURTON. London: J. and A. Churchill.—This little work is a translation of the Official Handbook of Midwifery for Prussian Midwives. The book was written by Professor Litzman of Keil, and submitted to a committee of experts. The name of the author alone is a sufficient guarantee for the excellence of the work. It treats the subject fully, and contains a clear account of the duty of the midwife to the woman during pregnancy, labour, and the lying-in period, as well as in the management of the child. Regular or natural labour is well and clearly explained, and the means whereby irregular labour can be recognised, and the *duties* of the midwife in all cases, are distinctly stated. We know of no work better suited for midwives than the one before us. We would add that the translator has done his part on the whole well, and has rendered the book into simple and clear English.

Questions on Magnetism and Electricity. By F. W. LEVANDER. London: H. K. Lewis. 1880.—This is a series of questions culled from the papers set at the Preliminary Scientific and First B.Sc. Examination of the University of London. It will doubtless prove of great service to many candidates, not only on account of the *matter*, but for the *manner* also. Many students fail from a want of knowledge of how to put their answers concisely into words, and from a cursory inspection of this little book, Mr. Levander appears to us to have answered the questions at once correctly and concisely.

Atlas of Skin Diseases. By LOUIS A. DUHRING, M.D., Professor of Skin Diseases in the University of Pennsylvania, &c. Part VIII. Philadelphia: J. B. Lippincott and Co. 1880.—We have received the eighth part of this high-class atlas containing, as usual, four plates. Dr. Duhring has here selected for illustration the papular variety of Erythema multiforme as it appears affecting the backs of the hands every spring; a characteristic Tubercular Syphiloderm of the side of the scalp, face, and neck; an example of Nummular and Circinate Psoriasis of the back; and the chronic scaly condition of Tinea tricophytina of the scalp, neck, and face. We have so often expressed our appreciation of the

marked success which has attended Dr. Duhring's efforts and we criticise the plates by so high a standard, that we almost shrink from saying that in Part VIII. there seems to us to be a slight falling off in excellence of execution. The subjects, however, are confessedly difficult. In the well-written letterpress accompanying the plates we see that Dr. Duhring employs the term Herpes iris so as to include all the vesicular varieties of Erythema multiforme.

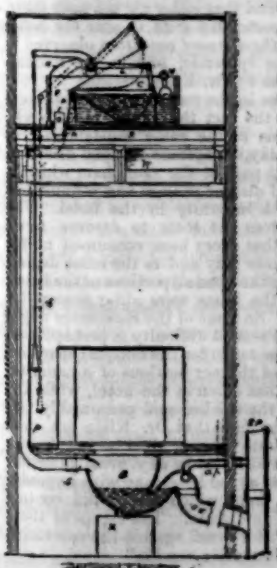
Archives de Neurologie. Edited by MM. CHARCOT and BOURNEVILLE. No. II.—It is not every addition to medical periodical literature which can be welcomed as important and useful, but such is certainly the case with this French journal of Neurology, which fills a distinct want in the medical literature of France. It is to be published quarterly. In the second number, which is before us, there are three original articles: one on Subacute Parenchymatous Neuritis, by M. Gombault; a contribution to the Pathology of Tremor, by MM. Debove and Boudet; and an account of Epileptic Dementia, by MM. Bourneville and D'Olier, with a description of microscopical changes in that condition by M. Brissaud. About sixty pages are occupied by an analysis of recent papers on the Physiology, Pathological Anatomy, Symptoms, and Treatment of Nervous and Mental Diseases.

Note-book of Materia Medica, Pharmacology, and Therapeutics. By R. E. SCORESBY-JACKSON, M.D., F.R.S.E. Fourth Edition, revised and brought down to the present date, by Dr. FRANCIS W. MOINET, Lecturer on Materia Medica and Therapeutics, Surgeons' Hall, Edinburgh. Edinburgh: Maclachlan and Stewart.—This well-known book deserves to be even better known. It combines the most useful and important part of the British Pharmacopœia, with therapeutical notes, not bald and heartless, but sound and really suggestive of investigation, experience, and that equally rare quality—proper faith in the action and uses of medicines. We heartily commend it to students and practitioners.

New Inventions.

THE SHREWSBURY VALVELESS WATERCLOSET AND WASTE-PREVENTER.

THERE may be seen in the Parkes Museum at University College a very excellent closet, the invention of Mr. W. White, F.S.A. The great merit of Mr. White's closet seems to us to be its simplicity, and from seeing it in action we are in a position to state that it works effectually. A reference to the woodcut will explain its construction. The basin (*B*) is composed entirely of earthenware, and is fixed upon a block (*x*). The syphon is supplied with an air-pipe (*a p*) going from its highest point, and the discharge is through a curved pipe into the soil-pipe (*s p*). So far there is considerable resemblance between the "Shrewsbury" and Bostel's closet. The water-supply for the closet is from a special cistern (*c*) raised five feet above the basin and filled through a ball-valve (*v*). In the cistern is a receptacle capable of holding two gallons of water, which can be tipped by the action of the levers (*H L*) so as to discharge its contents instantaneously into the funnel (*F*), and through the funnel into the two-inch supply-pipe (*P*). This supply-pipe is furnished with a "spreader," which is fixed exactly opposite the aperture of exit of the basin. The mode of action is simple. The closet having been used, a pull is given to the handle shown in the figure, and instantaneously the two gallons of water rushes violently down the service-pipe and flushes the basin forcibly and effectually. The tip-tray is soon filled again, and a second flush can be given if necessary. The closet has the advantages (1) of being very simple, (2) of having a separate water-cistern, (3) of preventing waste of water, (4) of being efficiently ventilated, and (5) of being moderate in cost.



A NEW PORTABLE STETHOSCOPE.

WE have received from Messrs. Salt and Son, of Birmingham, a portable stethoscope, arranged by Dr. Sutherland. The stethoscope divides into four separate pieces—the ear-piece, the chest-piece, and two hollow rods, forming the tube. These four pieces, when screwed together, form an ordinary stethoscope; when separated, it is intended that the two rods should be inserted transversely through the chest-piece and through the ear-piece, so that the whole stethoscope again appears as one piece, but so flat in shape as to be easily carried in the breast- or tail-pocket of a coat, thus doing away with the usual method of conveying the instrument in the hat. A brief trial of the instrument has proved that although it conducts the cardiac sounds as well as the ordinary stethoscope, it is less useful for pulmonary auscultation. The peculiar construction of the chest-piece necessary for the purpose above described may have some effect on this result. The idea is an ingenious one, and certainly the instrument is portable enough, although, when put together, rather ungainly and clumsy-looking.

EUKNEMIDA BOOT-SOLES.

OUR recent annotation on the subject of boots, and the attention we drew to the fact that the chief source of danger in getting "wet in the feet" was owing to the evaporation from the saturated absorbent sole, have given rise to some suggestions. The patent Euknemida soles are the invention of Mr. W. H. Smith, of High-street, Birmingham. Their mode of preparation is as follows: The soles are soaked in cold water, and are covered on both sides with pure tallow. After an interval of some time they are placed between dies cast to the shape of the sole of the foot, and are then subjected to an hydraulic pressure of 150 tons. This has the effect of rendering the leather exceedingly dense and of saturating it with grease. The cost of the process is small, and we believe the result to be satisfactory. We placed a pair of boots with Euknemida soles in water, so that the soles only should be in contact with the fluid; after fourteen hours' immersion we found that the boots were not in the least damp on the inside, and had not appreciably gained in

weight, and that when the superficial moisture adhering to the surface of the sole had evaporated, the soles remained perfectly dry. From the result of this test, we believe that the soles are waterproof, as alleged. They are said also to be more durable. Apart from the impregnation of the leather with tallow, the compression would, probably, increase their power of damp-resistance, and of wear. When the poet Gay said in his "Trivia, or the Art of Walking the Streets of London,"

> "Let firm well-hammered soles protect thy feet,
> Through freezing snows, and rain, and soaking sleet,"

he was ignorant of the value of the hydraulic press for attaining the same end. The word Euknemida is not, we think, well chosen. It is of Homeric origin, and was applied by the father of poetry to the "well-greaved" Greeks, and cannot, in any way, be applicable to the "well-greased" soles of Mr. W. H. Smith.

INDIA-RUBBER GLOVES FOR POST-MORTEM EXAMINATIONS.

WE have received from Messrs. Cow and Co., India-rubber Works, Streatham-common, a specimen of their gloves for post-mortem examinations. They are very well made articles, of the thinnest film india-rubber, purposely made as thin as is consistent with due strength, so as to interfere as little as possible with the sense of touch, which they leave almost normal. They are easily put on and taken off. Several sizes are made. To practitioners, for keeping their hands free from smell and contamination in post-mortem examinations, they will prove very valuable.

THE WELBECK POISONINGS.

OUR readers will remember the curious series of poisonings, in some instances fatal, which occurred at the time of a sale on the Duke of Portland's estate at Welbeck, Notts, in June of last year. It was suspected that they had been caused by some of the provisions used for purposes of refreshment during the sale, and suspicion fell upon certain cooked "American" hams which had been used. The Local Government Board, appealed to in the matter at the time, commissioned Dr. Ballard of its Medical Department to make inquiry into the source of the poisonings, and the report of the results of his inquiry is now before us. The report does not add much to our knowledge of the general facts of the case as they were made known during their occurrence in the local press, but it presents us with a clear, connected account of the occurrences, and throws a new and unpleasant light upon their source. Dr. Ballard obtained more or less complete accounts of seventy-two cases of poisoning, chiefly characterised by much and peculiar diarrhœa accompanied with marked intestinal irritation. Of these cases four died in a state of collapse. Dr. Ballard was able to secure portions of the meats, and particularly of the hams, in use on the day of the sale, and his general conclusion from the observed facts was that the ham was in fault. The meats were submitted to Dr. Klein, and the results of that gentleman's examination are so important that we give them in Dr. Ballard's own words:—

"1st. The absence of trichinæ in the ham was established.

"2nd. The presence in all three portions of ham—the raw ham and the cooked ham, both that which had been and that which had not been exposed to sewer air—of a species of bacillus, with sporules of the same, was demonstrated. The bacillus threads and sporules were in connexion with the muscular fibre and in the intermuscular tissue.

"3rd. Bacillus material from the raw ham and from that portion of the cooked ham which had not been exposed to the sewer air, was successfully cultivated in the incubator. Cultivation was not attempted with the ham and the mutton that had been exposed to sewer air.

"4th. Experiments upon animals, dogs, cats, mice, rats, rabbits, and guinea-pigs, by feeding or inoculation, or by both methods, were made both with material from the hams and with the cultivated material, with the following general results—viz., (*a*) The experiments made with the portion of ham that had been exposed to the sewer air, and with the mutton similarly exposed, produced only negative results. (*b*) The experiments made with the raw ham and with the portion of cooked ham not so exposed, produced in all but a few instances positive and remarkable results—viz., disease in the animals experimented on. (*c*) The experiments made with the raw ham were more uniformly successful than those made with the cooked ham. (*d*) The experiments made with cultivated material gave in all cases positive results. (*e*) The morbid condition produced in the animals, and found on post-mortem examination, was most uniformly pneumonia (in one instance with pleuritis) or pulmonary hyperæmia. In some, hæmorrhage into the pulmonary tissue was observed. In some, there was hæmorrhage into the tissue of the liver, or the organ was found enlarged. In some the spleen was found enlarged or congested. In three instances peritonitis, slight or severe, was found. Two dogs fed and inoculated with the cooked ham, and killed on the eighth day (one having suffered from colic on the first day of feeding), exhibited after death evidence of severe desquamative hyperæmia or inflammation of the stomach and intestines, the contents of which contained bacilli and a few pus-corpuscles. Bacilli were found in the blood of two white mice which died twenty-four hours after having been fed and inoculated with material from the raw ham; but no bacilli were discoverable in the blood of two other mice inoculated with this blood, although, when they were killed on the second and third days respectively, they both were found to have severe pneumonia with enlarged liver and large congested spleen. Nor were bacilli found in the blood of four other animals in which they were sought for after death.

"5th. In the kidney of W. W—— there were discovered evidences of parenchymatous inflammation, and the afferent arterioles and capillaries of the Malpighian corpuscles were found plugged with emboli formed of masses of bacilli.

"In these observations and experiments we have a clue to the solution of the difficulty, which the ordinary methods of inquiry failed to furnish. In two hams taken indiscriminately out of the same consignment there was found a *living parasitic thing*, capable of spreading by its growth and reproduction through the material in which it was found, and *capable of producing disease in animals into whose system it was introduced; capable also of growth and reproduction within the system of these animals.* Taking into consideration that the fact that a number of persons who ate of ham of the same consignment suffered from disease induced by such eating, and the further fact that in the kidney of one of them large numbers of bacilli (similar to those found in the hams experimented with) were found, it appears reasonable to infer that some of the hams of that consignment were similarly affected with the parasite, and that *either the parasite itself, or some virus essentially associated with it, was the active agent in the production of the diseased condition* observed in the human subjects of the epidemic, and in the animals which were experimented on by Dr. Klein.

"There are two difficulties in the way of accepting this explanation. There is, first, the fact that many persons who had partaken of other hams of the same consignment, in some instances day after day, altogether escaped disorder; and, secondly, the fact that part of the same ham which in Dr. Klein's hands produced disease in dogs and rabbits, had apparently been eaten with impunity in the hotel. The first of these difficulties does not seem to deserve much weight. It is not likely that every ham consumed at the sale was affected in the same way and to the same degree, that cooking had operated alike upon all portions of the hams, and that all who ate of the hams were alike susceptible to the injurious influence. So some of the consumers might be expected to escape. The second difficulty is perhaps more serious; but, if allowance be made for the unequal operation of heat upon the thicker and thinner portions of a ham; for the thinner portion being that eaten at the hotel, while Dr. Klein experimented with the thicker and presumably less cooked portion; and for the fact that Dr. Klein got even from this portion less uniform results than he got from a raw ham; there would not seem to be any great difficulty in understanding how people at the hotel may with impunity have eaten portions of a ham which really did contain material capable of producing disease. The escape of these people, then, does not count for much against the conclusion indicated by Dr. Klein's affirmative results."

THE LANCET.

LONDON: SATURDAY, MARCH 5, 1881.

POSSIBLY — we might say probably — the difference of capacity between a child born of parents and grandparents who have never been educated, and one bred from a stock which has been duly trained to intellectual exercises, is the difference of what we call brain-power as exhibited by two organs, one of which consists of cells or molecules endowed with an inheritance of "capacity" to be taught, while the other is composed of elements which have not reached the evolutionary status of being, so to say, educable. The physical basis of mind is undoubtedly capable of improvement by the developmental force of culture in successive generations. There is, however, a reverse to this view of the question, and it not less clearly and certainly points to the conclusion that the process of development by education may be carried so far as to destroy or exhaust the intellectuality which it is desired to exalt and perpetuate. The children of a stock which has been highly cultivated during several generations not unfrequently exhibit an instability of mental temperament which readily degenerates into a neurosis. This is especially notable in the cases of males in a family remarkable for the culture of its female members. The point — evidently one of the deepest interest — is strangely overlooked or wilfully disregarded by those psychologists and physiologists who lend the countenance of their scientific experience to the vague and mischievous hypotheses propounded by the promoters of the higher education of females and of women's rights.

In the ordinance of nature the female is endowed with a force tending to the reproduction from her arrested or suppressed organism of the perfect organism of the male. It is essential to the accomplishment of this physiological task that the female should be trained for the development of *capacity*—that is receptivity—as a cerebral property, rather than impressed with the particular bias of education in a special class of subjects, or on formulated lines. The distinction indicated is not fanciful but actual, and may be directly inferred from the lessons of experience. The male children of mothers who have been distinguished for *special* intellectual attainments are not, as a rule, remarkable either for their brain-power or the mental work they achieve; whereas the male children of mothers who have been notably characterised by *general* intelligence, without special talents, are commonly distinguished for intellectual ability. Experience seems to show that special brain-*work*, properly so called, on the part of the mother, exhausts the energy of brain-development—or reproduction—which, if conserved, would express itself in the mental perfection of her male offspring. The operation of the law of "development by work"—universal in its application under normal conditions—seems to be suspended when the work done is the result of a concentration of energy, by which force is drawn off from centres other than those thrown into special activity. It follows that the higher education of women is racially—whatever it may be in the case of the individual—an economic mistake.

There can be no question as to the possibility of educating women to the level of men on special lines. The total amount of cerebral tissue available for the production of a highly educated mind-organ is not so great in the case of an average female as in that of an average male. The cells or molecules ready to be impressed or combined—as the constituent elements of organised brain-substance must be impressed or combined to produce *positive* intellectuality—will be less numerous in the case of the female than in that of the male; but the greater pliability of the female constitution seems to render its component parts peculiarly susceptible of influences directing its powers into any particular channel. It is therefore in no sense — physiologically — surprising that women should excel in the intellectual exercises proper to men. Meanwhile the possible is not always the prudent; and those who, forming a hasty judgment based on appearances, conclude that because young women can achieve distinction in the pursuits of a university career, they ought to be allowed to do so, would do well to study the facts of heredity in the light of history and experience. When the subject comes to be investigated by this method, it will, we are convinced, be found that the course on which we are entering, and the policy to which we are committing ourselves in this country, are both unsatisfactory and, so far as the race is concerned, unsafe. For the sake of a little ephemeral distinction the feminine stock is being placed in jeopardy, and in the future it will be found that the totality of mind-weakness and mental disease has been augmented. Woman's mission is not, in any degrading sense, inferior, but it is complementary, to that of man; and not only her health and happiness, but the prosperity of the race as a whole, are directly dependent on the integrity with which the female discharges the duty that nature has devolved upon her in the economy of development. It is not a question of power, but of purpose; and those who have egged women on to overstep the boundary lines of the path marked out for them are not only doing wrong, but working mischief, of which the consequences will be apparent later on, when the time to remedy the effects of this evil counsel is past. Our appeal must now be to the observation and experience of the educators of youth and the students of national and intellectual history.

SIR TREVOR LAWRENCE will receive the thanks of all men who love what is sound, whether in or out of the Scotch medical corporations, for his opportune question in the House of Commons on Monday last. The College of SYME, and LISTON, and FERGUSSON, not to say of the WOODS and the GAIRDNERS, has more to gain than to lose by the exposure of a system so worthless as that of granting qualifications that should be an honour and a distinction on the ground of holding the lowest surgical qualifications, and granting these possibly *in absentiâ*, and on conditions essentially pecuniary. It is many weeks since we explained and exposed this system. We have contemplated its exposure for a much longer period, but have deferred it partly in the hope that the College itself would take steps to free itself of a system so indefensible and discreditable. But not a word has been uttered by the College in refuta-

tion of our charges that its Fellowship can practically be *bought*, and bought *in absentiâ*; and that the purchaser of a Fellowship, procured *in absentiâ*, may compete for a Hospital appointment in London on the same footing as a Fellow of the sister colleges by arduous examination, or may go to a colony with the ambiguous letters F.R.C.S.E. after his name, and pass easily for something that he is very far from being. If any friend of the Edinburgh College, or of the other Scotch corporations—for we regret to say that they are all involved in this honourless system of trade in honours—thinks it ungenerous in us to have stirred up this muddy pool, we can only reply that it is very hard to leave such work to be done in the advanced year of 1881. Fifty years ago such reforms would have been more opportune. But that they should still remain unaccomplished is the condemnation of the whole weak system calling so loudly for legislation.

Nothing could be more satisfactory and complete than the exposure and the confessions contained in the question of Sir TREVOR LAWRENCE on Monday, and the answer of Mr. MUNDELLA. The very defence—if such it can be called—of the College is a condemnation. The College informs the Vice-President of the Council that the Fellowship, which is to be had without examination, and even *in absentiâ*, is not a licence or qualification, but is a distinction! Which is the less creditable act, to sell a licence or a distinction? Surely, to sell a distinction, as likely to mislead more gravely! If it is wrong to lead the public to believe that a man is qualified, it must be more wrong to make him believe that he is highly qualified. Next to the public, the members of the profession have the best right of complaint, when a practitioner flaunts these ill-gotten distinctions as a means of conveying the impression that he has achieved feats of study and examination beyond those of his brethren. The answer given by Mr. MUNDELLA supplies another and a very striking illustration of the working of the Medical Council, of which we have given many before. Let us see how the Medical Council answers the charge suggested by Sir TREVOR, that a system of granting degrees *in absentiâ* has gone on without remonstrance or representation from the Medical Council. The Council says that in the year 1859 it was decided, "that in the opinion of the Council, for the future no licence or degree should be given by any of the bodies without examination." Since that time the opinion of the Council has been entirely disregarded by the bodies, and the Council has in no practical way revived or pressed the question. It has thus given another signal instance of its impotence and of the futility of its Recommendations. It is gratifying to be told by Mr. MUNDELLA that this subject will form part of the inquiry which it is now understood to be the intention of the Government to institute into the working of the Medical Acts. The scandal can scarcely survive the exposure of Monday. The House was full in every part, and neither the Scotch Corporations nor the Medical Council can feel proud of their appearance on the occasion.

THE action of anæsthetics upon the various forms of reflex action has been systematically investigated by Professor EULENBERG, of Griefswald. He finds that, neglecting slight differences, certain types of action may be distinguished. Certain anæsthetics (as chloroform) cause an initial, very transient, augmentation of some reflex actions; as, for instance, the "patella reflex" in dogs and rabbits, and then a progressive diminution, and disappearance of the reflex actions, in which it is noticeable that the patella reflex disappears earlier than the corneal reflex. The latter is lost at the same time as myosis and rigidity of the pupil occur. Conversely as the effect of the anæsthetic is passing off, the corneal reflex appears considerably earlier than the patella reflex. The same sequence is observable in the human subject during the induction of anæsthesia. The nasal reflex remains much longer than the corneal reflex, a fact which agrees with some observations made by ROSENBACH on the natural sleep of children; it is only in the deepest hypnosis that the nasal reflex disappears. The cessation of the patella reflex is a convenient indication that the degree of anæsthesia is sufficient for surgical purposes.

Other anæsthetics, as ether, and some other ethyl compounds, cause an increase in the tendon reflexes, which often amounts to an extreme degree, and continues for a considerable time after narcosis is complete. The corneal reflex, in anæsthesia from ether, is weakened only at a relatively late period, and is rarely completely abolished.

The double chloride compounds — ethylene-chloride, ethylidene-chloride, and methylene-chloride—diminish the reflex actions in rabbits and dogs, and the corneal reflex always disappears sooner than the patella reflex, and conversely the latter always reappears sooner than the former. It is worthy of note, in this connexion that, according to LIEBREICH, these agents have a primary action on the sensory cranial nerves; and also that, according to the observations of EULENBERG, in asphyxia the corneal reflex disappears some time before that of the patella. Some anæsthetic compounds, as bromethyl, have only a slow and slight influence on reflex action; the patella reflex is slowly lessened without preceding increase, and the corneal reflex lessens later, and is rarely completely arrested. The action of bromethyl is thus similar to that of ether, but feebler.

The state of the various reflex centres appears to stand in no definite relation to the condition of the psycho-motor or psycho-sensory centres. The depth of narcosis, the condition and degree of the anæsthesia, are in no way related to the condition of the reflex action. The order of affection of these centres is different in the case of different anæsthetics; so also is the action of the various narcotic drugs. An injection of half a gramme on dogs and rabbits has little influence on the reflex actions, and an injection during the course, or before the action, of an anæsthetic has no influence on the effect of the latter. In individuals who take morphia habitually, even when under the influence of the largest doses, the tendon reflexes are unaltered. Chloral hydrate, given to rabbits in doses of a gramme and a half, by subcutaneous injection, has an action similar to chloroform, but without causing any primary increase. In an advanced stage of narcosis the patella reflex gradually lessens, while the corneal reflex persists, although in lessened degree, in cases which are not fatal. Bromide of potassium, administered to guinea-pigs subcutaneously, in doses of one to two grammes, causes at first an increase, and then a radual diminution, of the patella reflex. Bromal-hydrate

and bromide of quinine have no definite action, if cases are excluded in which their action is fatal. If they cause death y producing asphyxia, the corneal reflex ceases, as a rule, before the patella reflex; the latter disappears only before the occurrence of exophthalmos, dilatation of the pupil, and the terminal convulsions.

OUR public health legislation appears to be getting more and more paradoxical, if, indeed, this be possible. At one and the same time its method of procedure is, perhaps, the most careful and the most reckless in existence. When directed to general measures, it is approached equally by Members of Parliament and by Cabinet Ministers with a caution and hesitation and dread of encroachment upon the freedom of action of individuals which, however consistent with the general spirit of the Constitution, is at times too apt to frustrate the best intended provisions for the public welfare. But when directed to local measures, it is pursued with a recklessness wholly inexplicable to the uninitiated, and which to them appears not unfrequently to stultify the general measures. The time seems to have come when Parliamentary procedure in respect to local measures involving public health provisions should receive the consideration of the Legislature, with a view to its revision and to its being brought more into accordance with the principles which govern procedure in respect to general measures.

We are induced to make these observations in view of certain local Bills introduced into Parliament this session. These Bills are not considered by a Committee of the whole House, but by a particular Committee appointed by the House, and if approved by this Committee are passed by the Legislature, seemingly without further consideration, and become law. Now, several of these Bills—Salford and Lincoln, for example—contain provisions for giving the Local Authority further powers than those contained in the Public Health Act, 1875, of dealing with infectious diseases, with a view to prevention, which overpass even the powers conferred upon the Central Government in the old Quarantine Act, which are as unlikely to be of practical avail as the powers of that Act, frustrating themselves by their own stringency, and which tend to recreate that insensate fear of infection which characterised the populations of the Middle Ages in face of plague—a fear which it is well known overrode every social and moral consideration, and, under the influence of the mere brute instinct of self-preservation, intensified the very evils which the measures of quarantine were designed to prevent. We have more than once raised a warning voice against this certain result of the existing, and we fear growing, tendency of local authorities to construct schemes for the effective control of the spread of infection, founded chiefly on theoretical views of *possibilities* of contagion; and suggested that a more careful study should be given to the history of quarantine in its efforts to this end. But there are other and singularly grave social considerations in the proposition to give almost absolute control over the actions and movements of the members of a family in which an infectious disease may appear, which should be dealt with by Parliament at large, and not by a small committee of its members.

We sympathise fully with local authorities and medical officers of health in their anxious desire to secure powers giving them fuller control over the dissemination of infectious diseases, but we deprecate the multiplication of measures which are mere "paper plausibilities," such as those of quarantine, and which involve such absolute dislocations of family, social, and industrial life as are now contemplated, and have in a few instances been permitted by Parliament. Any large exercise of these powers we believe to be impracticable—if, indeed, such exercise has ever been contemplated; and the necessary complement of them, in the provision to be made for the sustenance and avoidance of pecuniary loss by the persons subjected to them, are so imperfect in our estimation that the measures are certain to break down under trial, to the immeasurable injury to public health administration. There must be a limit to measures for the arrest or control of infection; and that limit is approached perilously near, if not exceeded, when powers are sought which would at the same time arrest the food-earning powers of the members of a community. After all, there are even greater evils to dread in a community than the spread of infection; and it is well to remember, in legislating for the avoidance of sickness and death, that the first consideration is the maintenance of life, and this at a somewhat higher level than Poor Law, municipal, or eleemosynary help contemplates.

Another and equally important subject with reference to this legislation on public health matters in Committee refers to questions of building. A glaring instance is here supplied by the Leicester Improvement Bill now before Parliament—or rather before a Committee of Parliament. There is probably no town in England where it is more necessary that the regulations of buildings should be subjected to careful regulation than Leicester. Under the Public Health Act, 1875, local authorities may make by-laws for this purpose with the assent and approval of the Local Government Board. To assist local authorities in their judgment in this matter, it is well-known that the Local Government Board have issued a series of by-laws as to new buildings which, as carefully explained in a circular letter, have two objects in view—namely, first, precision of provision, so that the house-owner knows precisely what he is called upon to do under the law, and is relieved from the crotchety action of local authorities when the matters were left to their discretionary judgment—a judgment which has been found by experience to be the source of endless mischief from the necessary changes in the individual members of the authorities; and, secondly, a careful and complete rendering of the law and practice on the subject. In this latter respect the model building by-laws are, it must be said, unique. Now, if the Leicester Improvement Act should be approved by the Committee of Parliament in its present form, it will traverse for this locality all that the Local Government Board has been attempting to achieve in the matter of building regulations under the Public Health Act, 1875, and leave the citizens of Leicester at the entire mercy in this important matter of their municipality and its surveyor for the time being. This has happened in other localities, and Parliament has not hesitated through its Committee on Bills thus to stultify its action in general measures.

Surely this cannot be necessary. Localities may have their peculiar requirements, but there are certain general

principles which apply to all localities, and these cannot be tampered with in public health matters without detriment to the cause of public health generally.

A BILL, embodying the provisions of the Alkali Acts of 1863, 1868, and 1874, with some further provisions, and an extension to some other chemical works, has been introduced into the House of Lords by Lord MELDRUM. The Royal Commission on Noxious Vapours reported in 1878, and Bills founded on the recommendations of this Commission were introduced in 1879 and 1880, only to fall with the other "innocents" at the end of the session. There was but little difference between these two Bills. Each was supplementary to the Alkali Acts, and provided for the registration and inspection by officers of the Local Government Board of many chemical factories besides alkali works. The Bill of 1879 gave power to sanitary authorities to take proceedings on their own account if they failed to get their grievances redressed by the action of the Government inspector. This power was omitted, wisely, we think, in the Bill of 1880. In each Bill the factories were divided into three classes, each class being subject to different regulations.

The Bill now before Parliament bears a general resemblance to its predecessors, but differs from them in one or two important particulars. In the first place, it incorporates, and therefore repeals, the Alkali Acts. This is an obvious improvement; one Act is nearly always better than four. Then the chemical works are divided into two, instead of into three, classes. The first of these classes consists of alkali works proper and of those copper works in which hydrochloric acid is evolved. The second class consists of only six kinds of works, the nature of which is described in a schedule. The works enumerated are sulphuric-acid works, cement works, chemical manure works, gas-liquor works (but not tar works), nitric-acid works, and sulphate of ammonia works. Salt works have evidently been omitted by accident from this schedule, for they are referred to specifically in Clause 9 of the Bill. A large number of other works, of which the most important are those of metal, coke, tar, salt-glazing pottery, and glass, are, however, excluded by design, and this emasculation constitutes the gravest fault of the new Bill. All the last-named works are notorious offenders in respect of noxious vapours, and inflict injury upon thousands, and it is impossible to imagine upon what principle of justice they have been struck out of the schedule. Take the tar works, for example. The fumes given out in the distillation of tar are extremely offensive, and even injurious to health, inasmuch as they contain sulphuretted hydrogen. Now, we willingly admit that the larger tar distillers take great precautions to avoid nuisances; but that their success is very limited will be attested by anyone who has the misfortune to live within the radius of their influence. Glass and pottery works are just as bad, and it is a common complaint with the owners of alkali works that their neighbours are allowed to throw into the air with impunity the very gas which the Act of Parliament compels them to condense with the utmost care.

The claim made by the public is certainly not an unreasonable one. The value of these great chemical industries to the country is fully recognised, and the present is certainly not the time when anyone would wish to see our manufacturers handicapped in the great struggle with foreign competition. Some nuisance must be caused by such manufactures, and if it be unavoidable, and not absolutely unendurable, it must be borne like the income-tax and many other annoyances. All that the public asks is that the manufacturers shall, in the words now commonly used in Acts of Parliament, use "the best practicable means" to avoid or abate such nuisances. With regard to acid fumes, good practicable means are well known, and are not costly; and it can hardly be denied that most nuisances might at least be reduced by proper care. Such care, involving nothing ruinous to manufacturers, should surely be enforced by Government.

Up to this point the public, as represented by several large sanitary Associations in the north and south of England, are not really out of harmony with the manufacturers. The evidence taken before the Noxious Vapours Commission proved the fact, often asserted in these pages, that the more influential manufacturers fully recognise their duty to the public, and are only anxious that their difficulties shall be recognised, that they shall be treated fairly, and that, to use the common expression, "they shall all be tarred with the same brush." The case for the manufacturers was ably stated by Mr. E. K. MUSPRATT in a paper read before the Society of Arts on Feb. 25th, 1880, and our own somewhat extensive experience confirms his statements. It is admitted on all sides that factories liable to inflict annoyance or injury on others should be registered, inspected, and subjected to penalties for the infringement of fair rules. At this point, however, agreement ends, for the manufacturers insist most strongly upon certain conditions which the Associations have hitherto been unwilling to concede. The manufacturers profess themselves willing to submit to the visits of properly qualified inspectors armed with the authority of the Central Government, but declare that they will not stand the intermeddling of local authorities, and local officials likely to be biased by local interests, and almost certain to be ignorant. This objection we hold to be a sound one, and the point has been practically conceded in the last as well as in the present Bill.

The other point in dispute is less simple. At the instance of the Associations a clause has been inserted in each of the three Bills allowing "any person" to take proceedings against any one or more of several manufacturers who jointly cause a nuisance. Such a right is already enjoyed as regards injury to property under the Judicature Act, and has already been successfully claimed. In principle the claim is not an unfair one, for when several factories lie close together it is often impossible to detect the offender. But we admit that we think the clause quite out of place in a Bill which on the face of it is merely an extension of the Alkali Acts, or, in other words, a scheme for more comprehensive Government inspection.

Let us try the system of the Alkali Acts first, and, if that fails give more power to sanitary authorities, or private individuals, or both. If the Government are wise they will strike this clause out of the Bill, and try one experiment at a time. The manufacturers will then lose their only fair reason for opposition.

Annotations.

"Ne quid nimis."

ROYAL COLLEGE OF PHYSICIANS.

AT a meeting of the Fellows on the 1st inst., a report from the Council was adopted recommending the annual appointment of two auxiliary examiners in each subject of the examinations for the licence, to be called upon whenever a candidate was liable to be examined by his own teacher. For the rest of the current year the following gentlemen were nominated to act as auxiliary examiners:—Chemistry: Dr. Marcet. Anatomy and Physiology: Dr. Allchin. Medicine: Dr. Ringer. Materia Medica: Dr. Moxon. Midwifery: Dr. Galabin. Surgery: Mr. Holmes. Dr. J. Braxton Hicks was elected councillor in the room of Dr. Greenhow, appointed censor.

ST. THOMAS'S HOME FOR PAYING PATIENTS.

THE St. Thomas's Home is at last announced as being open for the reception of paying patients; and Dr. Walter Edmunds, F.R.C.S., has been appointed as resident medical officer to the institution. It will be remembered that this Home Hospital has been the subject of much controversy in our columns and elsewhere for the last two or three years, and that very various views have been expressed as to the expediency of an attempt to admit well-to-do patients into an institution designed for charitable purposes. On many grounds, any attempt to make such an institution form part of the general system of a public hospital seemed undesirable, especially if the medical staff were to take part in its management, or be called upon to give their services gratuitously. But, as we have often pointed out, there is no such objection to a paying block, organised and nursed under the auspices of the lay authorities of a hospital, if the patients are allowed to select their own medical men; and on the other hand, such an institution may be of great benefit to many sufferers who are above the class of ordinary hospital patients.

It is therefore with no small interest that this experiment, which is in some degree the outgrowth of a germ idea thrown out in our columns, will be watched by ourselves and by the public generally. There is no concealment of the fact that to the authorities of St. Thomas's Hospital the scheme is simply one for making money, and restoring their finances to a more satisfactory condition. This is a legitimate object, if in its pursuance the comfort and well-being of the patients are chiefly kept in view. We are not sanguine of the financial success. We doubt even whether a fair interest will be paid on the initial expenditure. But what is of far more importance to the public and to the profession is that the scheme should have a fair trial, and that the possibility of its general adoption should not be prejudiced by any failure due to imperfect organisation.

So far as the medical and nursing arrangements are concerned, the outlook appears satisfactory. The nursing arrangements are to be under the direct control of the matron of the hospital, and for resident medical officer a gentleman "of the highest medical and surgical qualifications" has been selected. He is to be regarded as the ordinary medical attendant of the patients, who are, however, to be permitted to call in consultation with him any legally qualified medical practitioner. This, we presume, means that the ordinary medical attendant of the patient would, if desired, continue to attend, and the resident medical officer carry out his treatment and instructions in his absence. Only on such an understanding could the scheme be made to work satisfactorily to the profession.

The arrangement of the wards leaves much to be desired As at present planned, two of the ordinary large wards have been fitted up, the one for male the other for female patients. A portion at the entrance of the ward is separated by a wooden partition, and is to be used as a sitting-room. The main body of the ward is occupied in the centre by a passage, and on each side are curtained spaces, each of which forms a separate compartment or chamber. Viewed from above, the arrangement would resemble that of sheep-pens at a fair, the hurdles being replaced by curtains, which do not attain a height of more than six or seven feet. What degree of privacy can be provided by a heavy linen curtain may best be judged by those who have made the trial. Every word spoken, every cry of pain, every cough, or even snore emitted in the ward will be heard by every patient and intensified by the imagination; nor will there be that control on the part of the nurses, or the mutual sympathy and forbearance, which exert so powerful an influence in a general hospital ward. Much tact and discretion will be needed by the medical officer and the nurses to keep matters comfortable if the ward should happen to be full, the male ward being destined for twenty-four, and the female for sixteen patients. Seeing that experience has shown the authorities of the Fitzroy House Home Hospital that even four patients cannot be put in one ward, we fear that there will be serious friction if even twice that number are admitted to each, unless the "silent system" is superadded to solitary confinement.

For the rest, the arrangements of each compartment appear to be well made, although they may not satisfy the most æsthetic tastes. The charge which is to be made, from eight shillings a day upwards, is not exorbitant; indeed, we doubt whether it will be remunerative unless the wards are fairly well filled.

We have made these remarks in no unfriendly spirit, and we trust that our anticipations will prove groundless. What is perfectly clear is that, as at present arranged, the Home will not suit every case—if, indeed, many cases; nor will it serve as a substitute for private hospitals or lodgings. Whilst wishing it success, we cannot but regret that the experiment had not been made on a smaller scale, and under more suitable conditions.

COLLATERAL CIRCULATION.

IT is commonly believed that when an artery is occluded the establishment of a collateral circulation is due to a general increase of blood-pressure dilating the anastomoses of the occluded vessel. The accuracy of this explanation has been carefully investigated by Talma. Experiments on the tongue of the frog, showed that after the occlusion of an artery there is not only no immediate increase, but even a primary diminution, in the rapidity of the current in the collateral branches. In the dog, by means of a tonometer, it can be demonstrated that the pressure in the crural artery is not increased by compression of the carotid or subclavian artery, or both, nor is it lessened when these vessels are opened. Hence Talma concludes that the establishment of a collateral circulation, when an artery is closed, cannot be explained by increase in the general blood-pressure, but is due to dilatation of the vessels produced in some other way. In order to ascertain whether this be due to an influence of the vaso-motor and vaso-dilator nerves, he examined the temperature of the limb before and after section of the nerves which supply the branches of the occluded artery, and also the effect of stimulation of the peripheral extremity of these nerves. The experiments were made upon dogs, and led to the conclusion that after ligature of the crural artery, although dilatation of the vessels of the leg is produced by the influence of the nerves, so that the quantity of blood passing through them is increased, this

increase is very slight. He also stimulated the spinal cord after ligature of the crural artery, and came to the conclusion that the dilatation of the vessels was not the result of the action of the vaso-motor nerves. The dilatation of the vessels which could be produced through the vaso-motor nerves was altogether insufficient to explain the complete restoration of the circulation. Since this cannot thus be attributed either to the effect of increased general blood-pressure, or to the action of the vaso-motor nerves, Talma proceeded to investigate the anatomical condition of the collateral vessels, a main branch of which had been tied some time before death. In order to ascertain the dimensions of the vessels he injected them, and compared them with those of a normal leg similarly injected. From such experiments on dogs and rabbits he ascertained that the collateral vessels dilate shortly after the ligature, then those of moderate size, and later still the largest. More careful observations showed that there were rhythmical movements of the vessel between the point ligatured and the first collateral branch above, and that in this part of the vessel a local increase of pressure could be demonstrated, with which a dilatation of the capillaries corresponded. By means of the tonometer he demonstrated that this increase of pressure is purely local, and not general in the arterial system, and that it is proportioned to the size of the occluded branch in relation to that of the main trunk. Hence he arrives at the conclusion that the establishment of a collateral circulation is due purely to mechanical influences—an explanation which differs from that commonly held only in the extent of its application.

THE ACCIDENT TO MR. GLADSTONE.

WE are able this week to give the particulars of the accident—which was certainly serious, and might have been fatal—that happened to the Premier on the night of the 23rd ult. Alighting from his carriage at the garden entrance to his house in Downing-street, and springing quickly on to the stone steps, his foot slipped on a piece of ice; he fell backwards, and striking the back of his head violently against the edge of the kerb cut his scalp, crosswise for two or three inches, to the bone. Otherwise unaffected by the accident, he was immediately on his feet again; and, bleeding profusely from the wound, walked into the house. Dr. Blake, in the absence of Mr. Bond, the usual family attendant, speedily arrived and dressed the wound. Later on it was thought desirable that Mr. Gladstone should be seen by Dr. Andrew Clark, and when this gentleman arrived in the middle of the night he found the illustrious statesman calm, cheerful, and free from the smallest evidence of constitutional disturbance. Next day he was also visited by Sir James Paget, who, with Dr. Andrew Clark, has been since in daily attendance. We further learn that the wound united by "first intention," and that there have been no unfavourable general symptoms of any kind.

LIGHT AND LIFE.

MM. PAUL BERT and REGNARD showed some time ago that the rays of light which are necessary for the growth of vegetables, and especially for the development of chlorophyll, are situated in the red rays, near the line B of the solar spectrum. It has, however, been long known that other rays will suffice to restore the green colour to plants which have been blanched by deprivation of light, although the effect is produced more slowly; and the researches of M. Guillemin have shown that this effect can even be produced by the invisible ultra-red and ultra-violet rays. But there is such a difference between the action of the several rays that it seemed to MM. Bert and Regnard desirable, if possible, to discover the law which regulates their activity. The red rays, which give the maximum effect, have a length of 670 millionths of a millimetre. It was thought *à priori* probable that the other rays, acting in a specially energetic manner, would have a simple relation in length to the red rays, analogous to the relation existing between the wave-lengths of the vibrations of sound which produce the fundamental tones. The octave would be 335, and corresponds to the ray P. But here we are in the ultra-violet region, and the spectrum lessens so rapidly that nothing conclusive could be demonstrated. But the fifth, 450, falls in the region where the dispersion is not excessive—the indigo, between the lines F and G. Barley was allowed to germinate in complete darkess, and when the yellow blades were ten centimetres high, the box was placed two metres from an electric light, from which the light was dispersed by means of a powerful sulphide of carbon prism. In the spectrum thus produced the barley was placed and allowed to grow. The first green tint was visible in the region of the ray B; the third day it appeared between F and G, precisely in the region of the "fifth"; on the fourth day a green tint was perceptible in the red, orange, yellow, blue, indigo, and violet, with two maxima at the points indicated by theory, in the red and the indigo. A second experiment gave quite similar results. The experimenters propose to repeat their observations in regard to other actions of light upon vegetables. In conclusion, they point out that the green region of the spectrum was, on the whole, that in which the barley was least coloured, and there the growth which took place during the exposure was notably less than elsewhere. It thus seems that the green rays have a positively noxious influence.

CO-OPERATION OF HOSPITALS AND PROVIDENT DISPENSARIES.

THERE seems to be a very steady progress of public opinion in favour of really provident dispensaries, and further in favour of their being in organic relation with neighbouring hospitals. From year to year we have given our readers some account of the great movement for providing Manchester and Salford with provident dispensaries. The annual meeting of the Manchester and Salford Provident Dispensaries Branch of the District Provident Society was held on February 24th, under the presidency of Dr. John Watts. The report was a very instructive one, including much information, and may be found in the *Manchester Guardian* of February 25th. Nine branches are now in active co-operation in Manchester and Salford, and a tenth will soon be added. There had been an increase in the membership, and the whole of the six branches first opened were either quite or nearly self-supporting. The total number of ordinary paying members on the books was 9283, members in connexion with the clubs at large works 981, total 10,264; an increase of 828 on the numbers of the previous year. A much larger increase is expected this year. Great care and some money are expended in investigating the circumstances of applicants. The consequence is that in those charities connected with the provident dispensaries there is a much more considerable decrease in the number of persons relieved than in others. In the former there is an average decrease of 38 per cent.; in the latter the decrease is much less. Before the establishment of the provident dispensaries in 1872, the total number of in- and out-patients treated by the free medical charities was 89,442; in 1880 it was 72,837. The various parts of the great problem of provident dispensaries and their relation to hospitals are touched in this report, and have evidently been the subject of much labour and investigation. An attempt was made to alter the rule as regards the wages of those admitted as members from 30s. to 40s., but it was unsuccessful. We should still desiderate

more information than is given in our contemporary's excellent report on the amount of work done and money received by the medical men.

The *Hampshire Telegraph* contains a full report of a meeting to forward the provident dispensary scheme in connexion with the Royal Portsmouth, Portsea, and Gosport Hospital. The meeting was most harmonious, and showed how good a thing is a little consultation and conference with the medical staff. The dispensaries are to have a separate committee and separate accounts. Four medical officers are appointed as the out-door staff—viz., Messrs. Normal, Rundal, Pike, and Ford. They are to receive any surplus after the expenses are paid, and the payments of members are to be on the scale in use at the Royal Albert Hospital, Devonport, which has a provident dispensary in good co-operation.

TRICHINÆ.

THE meeting of the Académie de Médecine of February 22nd was devoted to the discussion of the viability of trichinæ, and opinions were expressed of a more reassuring character than those to which attention was called last week. M. Colin of Alfort has investigated the extent to which the process of salting renders meat innocuous, and he concluded from a number of experiments that the salting always finally destroys the trichinæ, but that it is impossible to determine the lapse of time necessary, and the danger from such food is greater the shorter the time since the salting. He also investigated the question of what amount of cooking is requisite to ensure destruction. Boiling he found to be effective provided it is maintained for a considerable time, which varies in its necessary length according to the size of the pieces of meat. Roasting only killed the trichinæ when it had been carried beyond the point common for mutton or beef. Quick roasting or boiling, leaving the central parts of the meat red, was quite insufficient. He expressed the opinion that many cases of gastric and intestinal disturbance are the indications of slight trichinisation. M. Davaine, however, mentioned that as low a temperature as 56° C. (134° F.) is sufficient to destroy them, and that in estimating the amount of time needed to cook a joint, thirty to thirty-six minutes should be allowed for each half kilogramme. The same question was considered also by M. Vallin, the results of whose experiments agreed with the statements of M. Davaine. He found that it was necessary that joints of less than six kilogrammes should be cooked for four hours, and that for larger joints boiling for at least five hours was required. The effect of salt in preventing the decolorisation renders the tint, he thinks, an uncertain indication of the sufficiency or insufficiency of the cooking. M. Chatin maintained that salting does not necessarily kill trichinæ. Infested meat was preserved in salt and then given to guinea-pigs, and in several of the animals trichinæ in process of development were found. Moreover, in meat which had been heated to 111° F. the trichinæ were found perfectly mobile.

In spite of the doubt as to the exact temperature at which trichinæ die, and the uncertainty as to the efficacy of ordinary cooking for their destruction, there is a general disposition to rely upon the fact that trichinosis in man is a very rare disease, in spite of the importation of diseased pork. Mr. Mundella lately stated in the House of Commons that our importation is twelve times as great as that of France; and it is reasonable to conclude, therefore, that twelve times as many trichinæ come to us as come to France from America. What is their actual number cannot, of course, be known, but it may be remembered that a single cutlet has been found to contain a hundred thousand worms. The fact that no outbreaks have occurred in this country is probably to be ascribed not only to the influence of cooking, but to the process of salting, which, as just stated, if efficiently performed, seems to kill the parasite. Mr. Mundella intends to wait for an outbreak of trichinosis before following the example of the French Government, and prohibiting the importation of American pork; and the Belgian Government have formed a similar resolution. It would be more satisfactory to know that some measures were taken, by systematic examination of samples of the meat, to ascertain the reality of the danger to this country; for it must not be forgotten that outbreaks and deaths have occurred here in past years.

A ROYAL ACADEMY OF MEDICINE.

IN his address at the annual meeting of the Royal Medical and Chirurgical Society on Tuesday last, the retiring President, Mr. J. E. Erichsen, took occasion to advocate anew a proposition made, discussed, and almost carried into effect more than ten years ago, that the different Societies (representative of the various departments of the profession) meeting in Berners-street should be amalgamated into one body. He pointed out that most of the Fellows of the Medical and Chirurgical Society are members of one or more of the other Societies, and that an amalgamation under one organisation would simplify the working, economise the time and expense, and systematise the labours now distributed between the older Society and the Pathological, Clinical, and Obstetrical Societies. He felt sure that a Royal Academy of Medicine with several sections might thus be securely established, and would be a gain in every way. The reasons which were adduced before against the scheme had, he thought, lost much of their force. This may be so, but it is possible that the same difficulties in adjusting the various claims of the other Societies—all of which have grown with remarkable rapidity since that time—will be even more apparent now than then. Mr. Erichsen will doubtless follow up his suggestion, or at any rate induce the in-coming Council of the Royal Medical and Chirurgical Society to take it up; and knowing what those difficulties were which prevented the amalgamation in the past, a way may be found to satisfactorily carry out the design. The matter is one fairly open for earnest consideration, and if raised again we shall probably hear much of "vested interests" and the like. The project can only be carried out by means of a cordial co-operation and a certain amount of mutual concession on the part of each of the Societies concerned.

DIPHTHERITIC ALBUMINURIA.

THE albuminuria which occurs so constantly in diphtheria was long believed to be a direct effect of the altered blood-state, without any renal lesion. Lancereaux and Brault, however, have described certain organic changes in the kidney. They found the epithelial cells swollen, badly defined, infiltrated with granules of protein, and the lumen of the tubules obliterated in many points by colloid or granular masses. These lesions are analogous to those described by M. Cornil in acute poisoning by cantharidin.

The nature and mode of production of this diphtheritic nephritis is the subject of a recent communication by M. E. Gaucher to the Société de Biologie. It may be *à priori* expected that the lesion would be due to the same mechanism as that which produces the similar changes which have been found in some other infectious diseases. In the nephritis which sometimes occurs in typhoid fever, for instance, there is a similar granular infiltration of the epithelial cells and a similar obstruction of the lumen of the tubules by diffused material or globular masses. These alterations have lately been ascribed by Bouchard to the infiltration of the kidney by bacteria. In a case of

malignant diphtheria in which the urine contained a considerable amount of albumen, M. Gaucher, adopting all precautions to prevent the access of external germs, was able to demonstrate without difficulty the presence of bacteria in both the blood and the kidneys. The urine was collected in a glass, washed with alcohol and heated, and, examined immediately, was found to contain a large quantity of spherical or punctiform mobile bacteria (monads or micrococci). There were no rods or chains. In the blood the same organisms were found, less numerous, but perfectly distinct. The patient died seven days after the onset of the disease. The kidneys, examined in the fresh state, were found crammed with bacteria similar to those which had been found in the urine and the blood during life. The epithelial cells of the urinary tubules were filled with highly refracting granules, strikingly similar to the micrococci found in the urine. In sections which had been hardened in osmic acid the same granules were found. From these facts Gaucher concludes that diphtheritic nephritis is of parasitic origin, and that the albuminuria is the result of the passage of the bacteria of the blood through the kidneys. The albuminuria is thus to be regarded as an effort at the elimination of the poison.

OPENING OF MUSEUMS AND PICTURE-GALLERIES ON SUNDAY.

WE are glad to find that the medical profession is well represented in the list of signatures to the address presented to the Premier in favour of opening the British Museum on Sundays. Those who are not compelled to remain in town on Sunday, or who simply obtain such glimpses of the streets as may be gained on the way to or from a place of worship, can have no notion of the melancholy and morally mischievous state of any large city, and particularly London, on the day set apart in every week for rest and religious observances. It is difficult to understand how the youth of the metropolis is preserved from recourse—in sheer dearth of occupation—to the practice of the worst vices. The well-to-do classes, with their comfortable homes, their Sunday *réunions*, or family gatherings, do not participate in the general misery of gloom and inactivity. Some recent inquiries and investigations have led us to take an especially urgent view of this question, and we are convinced it is one which ought to be pressed on the attention of the Government. The argument that a few officials may be inconvenienced to meet the demand cannot weigh for one moment against the crying need of the masses. Let the personal service be made optional; and, if it must be so, let public subscriptions be invited to defray the increased cost. Prejudice must be set aside, and the question discussed on its social merits. It is one of a pressing character, and it relates to a grievance which lies at the root of much demoralisation, and the ruin of many lives.

THE TRANSMISSION OF GLANDERS TO THE DOG.

THE fact that glanders may be communicated to the dog by inoculation, even more certainly than to the rabbit, has long been known, and has lately been confirmed by M. Galtier, who has never met with a refractory subject. Usually, however, the morbid effects remain limited to the points inoculated; the region becomes swollen, and an ulcer forms analogous to the chronic farcy ulceration in the horse. The wound secretes an abundant oily, yellowish pus, which often forms a crust, beneath which the ulceration goes on. As a rule recovery soon follows. Very rarely ulceration occurs elsewhere in the body, and now and then there is evidence of a widespread action of the virus. A dog having been inoculated on the shoulder, and presenting only slight local lesions, the pulp of a lumbar gland was inserted beneath the skin of a donkey, with the result of causing the disease. This seems to show that the poison may be generalised, although the lesions are local; that the virus may be widely spread throughout the system of the dog, and yet cause no general anatomical alterations. It has been said that one attack of glanders in the dog confers immunity against subsequent attacks, but M. Galtier found that two, three, four, five, and even more successive attacks could be induced. After successive inoculations, however, the susceptibility of the animal, originally much less than in the solipeda, lessens, the disease is characterised by lesions less and less marked, and seems ultimately to disappear. Another fact ascertained is that the power of the virus decreases when it has been several times cultivated in the same animal. Donkeys inoculated from a third, fourth, or fifth attack of glanders have had much milder and less acute attacks. They commonly lived three or four weeks after inoculation, and presented more limited lesions than those animals which were inoculated from the horse or from the first attack in the dog.

THE SECTARIAN SPIRIT IN HOSPITAL CHARITY.

SOONER or later the sectarian spirit must be eliminated from hospital charity if we are not to relapse into the religious barbarism of the Middle Ages. Every step forward in the quest for Truth enlarges the view and tends to the discovery that what have been supposed to be the essentials of religion are at best its accessories, and in many cases its shackles. We cannot afford that progress should be hampered by the bonds and weights imposed by those who have founded churches and charities with limited regards and special purposes. Nowhere are such limitations more intolerable than in relation to the aid human nature impels us to render to the sick. Such restrictions as require that the physicians and surgeons attached to particular hospitals shall be members of the Church of England are antagonistic to the broad principle of humanity, and discredit the form of Religion, in whose name they are imposed. Equally absurd and offensive, not only to good taste, but to common-sense, are requirements like that which appeared in a recent advertisement for a resident secretary for Charing-cross Hospital—namely, that "candidates must be members of the Church of England." It would be well if the logic of facts could be brought to bear on the committees of institutions conducted on the narrow principles indicated by notices of this class. Those who are free from the prejudice they indicate would do well to withhold their subscriptions both to hospitals and Hospital Fund, unless these can be accepted with the stipulation that the charities to which it is intended to contribute shall be administered on the simple grounds of *need*, by agents untrammeled by special affectations of belief or pretences of churchmanship, against which the spirit of manliness revolts.

EXTENSION OF THE HIP-JOINT.

DR. E. H. BRADFORD has recently been experimenting upon the effects of weight extension on the hip-joint in the cadaver. Needles were inserted into the pelvis and into the great trochanter of the femur upon the same side, and "extension was applied in such a way as not to alter the axis of the limb relatively to the plane of the pelvis, and thus disturb the position of the needles." In the body of a child, ten years old, an extending force of 150 lb. was applied without producing any change in the distance between the needles; in another experiment, on an adult male, 100 lb. was employed, but no separation of the needles could be noted, and this not even when all the soft parts over the

joint and the capsule had been cut through, and the head of the femur dislocated and replaced. On the other hand, in the body of a full-term fœtus, a weight of a pound was quite sufficient to separate the needles 1 mm. Dr. Bradford states that the fibro-cartilaginous ring attached to the acetabulum grasps the head of the femur so securely that separation of the two bones is quite impossible by extension alone; in the fœtus at term this ring is not fully developed. It must be borne in mind that these observations were all made on healthy joints. It is not difficult to understand that disease of the articulation may cause such a softening and relaxation of the cotyloid ligament that separation of the bones may be readily produced. At any rate, of the efficacy of this plan of treatment intelligently carried out there can be no doubt.

LATTER v. BRADDELL AND WIFE AND ANOTHER.

THIS case, which was tried in the Court of Appeal on Feb. 24th before Lords Justices Bramwell, Baggallay, and Brett, is one which shows the occasional annoyances to which medical practitioners may be subjected from no fault of their own. It appears that Latter was a servant girl in the employ of the Braddells, and that in October, 1879, Mrs. Braddell, suspecting Latter to be pregnant, accused her of it, and, on her denying it, had her subjected to a medical examination by Mr. Sutcliffe, of Knutsford. The girl then brought an action for assault, which was tried at the Assizes before Mr. Justice Denman, but as the jury were unable to agree upon a verdict they were discharged. The case was next tried before Mr. Justice Lindley, who withdrew the case as against the master and mistress from the jury, and as against the surgeon he instructed them that they must be satisfied "that the girl had been overpowered by force, or by threat or terror of actual force." The evidence, however, went to show that the girl never objected to take off her clothes, and that she lay down and was quietly examined. Mr. Murphy urged, on behalf of the plaintiff, that the fact of the girl neither struggling nor forcibly resisting was no more proof of consent than a schoolboy holding out his hand to be struck, but Lord Justice Bramwell upheld the instructions given to the jury by Mr. Justice Lindley, and thought that there had been no evidence that the girl's wish had been overborne by violence or threat. The doctor, his lordship added, had appeared to have acted kindly throughout, but he dropped a word of warning to the effect that in such cases the wish of the master and mistress was no authority in the eye of the law for a doctor to examine a patient against her consent. It appeared to his lordship to have been rather a high-handed proceeding throughout. Judgment for the defendants was accordingly given.

GLYCOGEN IN MUSCLE.

THE relation of glycogen and lactic acid in muscle has been investigated by Böhm. The common method of estimating the amount of glycogen by the prolonged action of heat fails to extract at least 20 per cent., and this can only be obtained by heating the muscle pulp for twelve hours, with water, in a Papin's digester. In a series of investigations the amounts of glycogen extracted by simple heat and by heat under pressure were compared, and it was found that by the latter the amount was from 12 per cent. to 25 per cent. greater than by the former; but even on this method about 5 per cent. of the glycogen is left behind, and hence the procedure is unsuitable for the determination of slight differences in the amount of glycogen.

According to Böhm, the amount of glycogen in muscle does not exceed 1 per cent. of the moist tissue, and its amount is greatest two or three hours after an abundant flesh meal. In fasting animals it does not exceed ½ per cent. In one case, after a full meal, the whole of the glycogen in the muscles of the body was estimated to amount to fifteen grammes, and that in the liver to sixteen grammes. A storage of glycogen thus evidently occurs in the muscles, just as in the liver, and to nearly the same extent. When no food had been taken for thirty-six hours, the amount of glycogen was only ·276 per cent., and three days after the last meal it was only ·036 per cent. Contrary to many statements, Böhm found that the amount of glycogen does not lessen during the first two hours after death, even when the post-mortem rigidity reaches its highest point, which in the animals experimented on—cats—is attained in six to eighteen hours after death, provided the onset of decomposition is prevented by a low temperature. If, for the sake of comparison, one-half of the body is kept in a warm chamber, the amount of glycogen rapidly falls, although it does not completely disappear. From these observations it would seem that the glycogen cannot be the source of the lactic acid which makes its appearance during the post-mortem rigidity. In order to ascertain the relation between the two, the glycogen and lactic acid were estimated in a series of observations, and the result was that the production of lactic acid was not attended by any diminution in the amount of glycogen.

SCIENCE LECTURES.

PROFESSOR STRUTHERS delivered a few days ago a Science Lecture in St. Katharine's Hall, Aberdeen, in which he gave an account of the circulation of the blood and the general balance of the economy. He referred to the practice of bleeding in former times and to its discontinuance as an indication of progress. "We confess," he said, "that the old practice of bloodletting was wrong, and to our brethren of the clinical profession who are wont to be the most severe on us for these changes, we can only reply with that meekness which becomes the confession of error, that unfettered by articles we have moved on and left our errors behind us." Professor Struthers concluded his lectures by showing how many of the facts he had presented to his audience had been obtained by the practice of vivisection, and spoke strongly in regard to the absurdity of those decrying vivisection, who in deer-stalking and grouse-shooting were in the constant habit of wounding sensitive animals, and of leaving them without compunction to die.

A CAUSE OF SUDDEN DEATH IN GANGRENE.

J. PARISE has lately attempted to show that one of the causes of death in cases of extensive moist gangrene is the entrance of putrid gas into the veins, and its rapid passage towards the heart. To support his proposition, he has placed on record two cases of sudden death during gangrene of the leg, in which very shortly after death—an hour and a half and two hours respectively—gas was found in the large venous trunks and in the heart. There is not here any decisive proof that this gas was present before death; but from the great development of gas which is known to take place in the soft tissues in a state of moist gangrene, there is some probability that this is so, and then, if in sufficient quantity, it might in reaching the heart cause sudden death like air drawn into veins during operations close to the heart. Parise maintains that it is thus, and not by any special toxic effect of the gas, whose nature he does not record, that death is produced. He advises that where prompt amputation cannot be performed, the main vein of the limb should be compressed or tied to prevent this absorption of gas, and then later on amputation be performed above the point of pressure. We conceive, however, that there are very serious objections to interfering with the return of blood to the heart in gangrenous limbs, and that

this suggestion arises from an exaggeration of the danger of the absorption of the gas at the expense of more general and important pathological conditions.

THE BLOOD IN HIBERNATION.

IN the autumn of 1879 Prof. v. Wittich received twelve living German moles (Mus montanus), in order to investigate the amount of glycogen in the liver during their winter sleep. One animal was killed accidentally immediately after its arrival, and the results obtained on a microscopical examination of the blood led to an examination of the blood of the other animals, all killed in perfect health, and in all the same appearances were found. One of the animals had died on the journey without signs of disease, although perhaps in consequence of a bite from another animal.

The blood taken from a vein in the peritoneal cavity contained a large number of thread-like moving objects, which moved the blood-corpuscles lying near them, and, after diluting the blood with a half-per-cent. solution of chloride of sodium, presented an appearance identical with that of the spermatozoa of the frog. These organisms appear to be the same as those described by T. R. Lewis as existing in the blood of healthy rats. They are much larger than the spirillæ met with in the blood in relapsing fever. They were found in the blood from various parts, arterial and venous, in every animal. They disappear from the blood as soon as the decomposition sets in and the putrefaction-bacteria appear. They were very numerous, ten or twelve being found in every drop of blood, and they furnish a new proof of how large a number of parasitic organisms may exist in the blood without causing any disturbance to the general health. Attempts were made to inoculate guinea-pigs, but in every instance with a negative result.

THE INVESTIGATION INTO THE WORKING OF THE MEDICAL ACTS.

IT may now be considered settled that we shall have an inquiry by a Royal Commission into the working of the Medical Acts. Mr. Mundella says the determination to proceed by a Royal Commission has been arrived at after consultation with members of the House who served on the late Select Committee. If this Commission is so appointed as to consist of competent persons it will justify itself.

CASE OF NEPHRECTOMY.

ON Feb. 22nd Mr. Morrant Baker performed the operation of nephrectomy on a child in the Evelina Hospital. Several weeks previously Mr. Baker had cut down upon the right kidney from the loin, and had found it to be sacculated and suppurating. As free drainage failed to relieve the symptoms, the organ was excised from within the capsule through the nephrotomy wound. We are informed that the child is "doing remarkably well, the temperature for the last day or two ranging from 100° to 98°, takes nourishment well, and is picking up strength." This operation has not yet established itself as a recognised surgical procedure, and it is most important that all the cases in which it is attempted should be fully recorded.

THE CAUSE OF DEATH IN INQUEST CASES.

MANY coroners habitually disregard the enactment of the Birth and Death Registration Act of 1874, which specifies the "cause of death" as one of the particulars to be ascertained and certified for insertion in the death register in inquest cases. This detracts much from the value of the mortality statistics prepared and issued from time to time by the Registrar-General. The Registrar-General, in his last weekly return, calls especial attention to a recent inquest in Hackney, which was held upon a child aged three years, the verdict in which case was "Sudden, suppressed eruption." Well may the Registrar-General deplore the vagueness of such a verdict, which is useless for the purposes of public health or mortality statistics. There are good grounds for believing that this case was one of suppressed small-pox, but if this were the case the record of fatal small-pox cases in London last week is made deficient. As inquests are held in more than 5 per cent. of the total deaths in England and Wales at an average cost of about £3 each, it is manifestly important that the verdicts should throw some light upon the true cause of death.

A CASE of some importance, as bearing on the use of morphia as a local application in skin diseases, formed the subject of a coroner's inquiry at the London Hospital on the 28th ult. The report from which we quote (*The Times*, March 1st) does not state the nature of the skin affection, which occurred in a woman fifty years of age. Lead lotion was at first prescribed, but owing to the irritation this was changed for a lotion containing liq. morphiæ hydrochloratis. It appeared that the prescription was misread by the dispenser, the word "liq." being written in the wrong column and overlooked by him, and the strength of the solution was, therefore, made half as much again (as regards the morphia) as intended. The mistake was most unfortunate, for the patient succumbed with symptoms of narcotic poisoning, and her death seems to have been attributable to the morphia. It would be obviously unfair to offer any criticism on the facts as here presented; but the case should inculcate the caution necessary to be observed in prescribing powerful toxics to the diseased skin.

THE *Manawatu Times* records the death, on Christmas Eve, of Dr. Walker, surgeon to the Constabulary Forces stationed at Taupu, at the age of thirty-six. The deceased gentleman had obtained the New Zealand Cross for distinguished bravery in the field during the last native war. A local newspaper, at the time the decoration was awarded, testified of Dr. Walker that times out of number he had "carried men out of the thick of various frays when the bullets were as plentiful as hailstones; on one occasion he was carrying a wounded man on his back to a place of safety, when he (the wounded man) was shot dead whilst being so transported."

EDMONTON still continues to furnish illustrations of the practices of builders in the metropolitan suburbs. Five summonses against a builder were recently heard before the magistrates of this district for having used improper lime, bricks, and timber in the erection of certain houses. Fines and costs were imposed to the amount of £75 11*s.* 6*d.* Would that the example of the Edmonton local authority were more largely followed by the local authorities of the metropolitan suburbs.

A COACH-BUILDER of Lyons has just completed forty ambulance-waggons, which are to be sent to Athens at an early date. These are constructed after an improved model, and are destined to follow the army over the roughest and most difficult country. They are very light, and have only two wheels. Each waggon contains four beds, which are suspended in a manner calculated to lessen, as far as possible, the shaking incidental to the road.

WE are informed that the Royal College of Physicians and the Royal College of Surgeons of London contemplate making a grant of fifty guineas towards the expenses of the International Medical Congress, to be held in August next. The other medical corporations are considering whether they will not follow this example.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Barnsley (*Rural*).—Dr. Michael Thos. Sadler's report for 1880 is one of exceptional interest. In addition to information on the sanitary state of the district for the particular year to which it refers, it gives a brief summary of the work which has been done in the district since it was formed seven years ago. This account is peculiarly gratifying, and shows what may be effected by a judicious officer of health under circumstances of industries and populations having many and peculiar difficulties, to which, we fear, medical officers of health have too frequently yielded. When Dr. Sadler began his duties he had to contend with centres of population which had grown without any regulation whatever from pure rural villages into crowded colliery towns, without drains and sewers, insufficiently supplied with water, and this not always pure, and with no arrangements for the proper disposal of filth of any sort, liquid or solid. The populations were, in fact, living in a most deplorable state amidst their own accumulated filth, and the result was seen in an average rate of mortality of nearly 27·0 per 1000 inhabitants throughout the district, and in some parts a death-rate of 40·0 per 1000. "Since then, by patience and perseverance, by repeated statement of pressing needs, by not asking for too much at a time, but bringing forward first the most urgent wants, and those the necessity for which could be most clearly proved, a great improvement has been brought about." No less than 13,881 yards (nearly eight miles) of main sewerage have been constructed, exclusive of a large amount of drainage work done by private owners; several parts of the district have now an excellent water-supply; and a system of public scavenging has been introduced into sundry townships. By-laws respecting new buildings have also been adopted, and under them not less than 667 houses have been erected, which it may be assumed will, at least, be free from the structural evils which too commonly characterised the older houses. There is still much to be done in the district, but Dr. Sadler shows that by pursuing the same course he has hitherto done improvements of the sort already accomplished are still being steadily prosecuted in the parts of the district that need them; and a death-rate of 23·3 in 1880, as compared with the death-rate of 27·0 seven years ago, may be taken as evidence of the benefit the district has already obtained from the change effected in its sanitary state.

Kettering (*Urban*).—Mr. J. Winter Dryland's report for this sanitary district for 1880 is particularly interesting from its giving an account of the sanitary improvements which have been made in Kettering during the past eight years. Eight years ago this town, although occupying an admirable natural situation, was without proper drainage, had numerous filthy open privies and ashpits, its soil was sodden with leakage from such apologies for drains as existed, and from its foul middensteads, and a large number of the wells from which it derived drinking water were polluted. As a consequence of this state of things every summer and autumn brought its long list of cases of diarrhœa and typhoid fever with many deaths; and whenever small-pox, scarlet fever, or measles appeared, they spread rapidly, and the cases were usually of a malignant type. Now, Kettering has an excellent system of drainage, the sewers are fairly well ventilated and periodically flushed, and the sewage is almost completely purified before being cast into the brook into which it is ultimately passed. The town has the luxury of a constant supply of pure water from a deep well. A thorough system for the removal of ashes and dirt has been organised, and is well carried out by the servants of the Local Board. The greater number of privies have been converted into waterclosets. Where sink-pipes have been found in connexion with drains they have been disconnected. A hospital for infectious diseases has, moreover, been provided. Accompanying these changes fever and diarrhœa have diminished. No death from typhoid fever was recorded in the town in either of the years 1877, 1878, and 1879, and only nine deaths from diarrhœa occurred in 1880. Other zymotic diseases have also diminished. Kettering has reason to congratulate itself on the intelligent action of its sanitary authority and officers.

Mile-end Old Town (*Metropolis*).—Dr. Corner estimates the population of this district for the purpose of his report at 110,000, and he gives the birth-rate for 1879–80 at 38·5 per 1000 inhabitants, and the death-rate at 22·96, that of the metropolis generally for the year being 23·25. He has little eventful to relate in his proceedings during the year. Scarlet fever was the one exceptionally fatal disease, but although Dr. Corner holds it to be "the most intractable infection with which we have to combat," he thinks that "even its subtle destructive power can be successfully defeated by judicious management and sanitation."

Hastings (*Urban*).—Mr. Ashenden in his summary for 1880 gives the death-rate for that year as 18·16, the population being estimated at 40,400. The infantile mortality is reported to be "still very high," and is assigned, "unquestionably," to "the increasing use of artificial foods." The use of the sanatorium appears to be becoming more and more appreciated, and a combination of the urban sanitary authority with the rural sanitary authority for erecting a more capacious building is suggested.

East Dereham (*Urban*).—Mr. Henry Bird Vincent reports a death-rate of 16·4 per 1000 inhabitants during 1880 among a population estimated to number 5790. Two things specially attract attention in his report—namely, his comments upon the futility of his action in dealing with scarlet fever, and his expression of a hope that presently his sanitary authority will put a scheme of scavenging (and that not an expensive one) in operation in his district.

Axbridge (*Rural*).—Dr. De Courcy Lyons reports a death-rate of 13·3 per 1000 inhabitants during the last nine months of 1880. He refers to cases of diphtheria in one part of the district, apparently in connexion with the use of very filthy pond-water for drinking.

Longton (*Urban*).—Mr. James Weaver, reporting to the Town Council, and tendering his resignation on account of ill health as medical officer of health, observed:—"I have been your medical officer for ten years, and the first year (1871) I took office the death-rate of the borough averaged 41 per 1000, and the rate for the first three years (1871, 1872, and 1873) averaged 31·3. The average death-rate for the last three years (1878, 1879, and 1880) was 24·2, and the rate for 1880 is 22·9 per thousand. These figures show a saving, at the lowest calculation, of 150 lives a year, and I think your officials may fairly congratulate themselves on the result of their ten years' work; and to save so many lives each year is, I consider, a grand reward to the authorities of the borough for the money and labour which have been expended on its sanitary arrangements."

Peterborough (*Urban*).—Mr. Sinclair Thomson estimates the population of the city at 25,000, and gives the death-rate for 1880 at 20·3 per 1000 of the inhabitants. Last year appears to have been exceptional from the little prevalence of zymotic diseases in the city. But it is obvious there are several things to be done in Peterborough before it will enjoy the full degree of health its population ought to have. Although the municipal water-supply is excellent, there are still many wells in use, of which the water is impure. Moreover, from certain illustrations of the occurrence of typhoid fever given by Mr. Thomson, it would appear that the privies and ashpits of the city are not always constructed or regulated as they should be.

Greenock.—Dr. Wallace reports that the mortality of the town, during the four weeks ending Jan. 29th, was at the rate of 25·0 per 1000 of the population annually. Among the cases of infectious diseases ascertained during this period by the sanitary department to exist in the town, 107 in number, there were twelve cases of typhus. The number of these cases removed to the local authority's hospital was twenty-one, including the whole of the typhus patients. The greater proportion of cases of typhus were traced to pre-existing instances of the disease.

Holbeach.—Mr. R. R. Harper reports for this town during 1880 a death-rate of 12·9 per 1000 inhabitants. Although he regards this rate of mortality as very satisfactory, he is by no means content with the sanitary conditions under which the population lives, and particularly complains of the bad state of privies and ashpits and the faultiness of the water-supply.

St. Marylebone.—Mr. Wynter Blyth has some interesting observations in his report for St. Marylebone for the month ending the 9th February on the probable effect of the inter-

ruption of domestic refuse cleansing and of due flushing of drains and waterclosets, in his district, during the memorable frost and snow-storm in January. The "dust-carts" had to be taken away from their work to free the great thoroughfares, and the frost sealed for several days numerous water-pipes. Mr. Blyth gives some instructive advice as to dealing with the infection of foot-and-mouth disease now existing among the metropolitan cattle-sheds.

VACCINATION IN LEEDS.

The vaccination officer for Leeds, Mr. Thos. Holmes, has presented to the Board of Guardians his report for the half-year ending June 30th, 1880, and a supplementary report for the year 1879. These reports, as previous ones by the same officer, show what can be done when the vaccination officer does his duty thoroughly, has his heart in his work, and is efficiently supported by an intelligent Board which is loyal to the vaccination law. The reports make clear the remarkable fact that the proportion of children vaccinated in Leeds is 3·14 larger than in the whole of England and Wales. The Local Government Board, in its last annual report, observed of vaccination in Leeds, "that it showed with what completeness a system of vaccination may be carried out by efficient administration." By the present reports it is evident that the efficiency is kept up. No death from small-pox has been registered in Leeds since July, 1877, and one case of the disease only occurred then. While the number of children born from year to year who are unaccounted for in vaccination is now reduced almost to a vanishing point in Leeds, over 9000 young children are unaccounted for annually in London. Mr. Holmes says of his present reports, they "give the largest numbers that I have yet been able to present as vaccinated; and clearly show that the general disposition of the inhabitants is to obey the law and secure for their offspring the safeguard against small-pox afforded by vaccination."

THE MONSALL FEVER HOSPITAL.

A conference has been held at the Royal Infirmary, Manchester, between the Committee of the Monsall Fever Hospital and the representatives of various local authorities and boards of guardians on the financial state of the hospital. A proposition has been made to the boards of guardians who use the hospital to raise their weekly payment per case, and a committee has been formed, consisting of representatives of the local authorities (eleven in number) and of the Manchester Health Committee, for further conference with the committee of the hospital, on the 17th inst.

Mr. Dodson has been questioned in the House upon the vaccination of very young infants in workhouses. It would appear that the mothers leave the workhouse not unfrequently as early as one fortnight after their confinement, and that as a rule children born in the workhouse pass into the outer world unvaccinated, and probably remain so. As, however, these children are as liable to small-pox as any other unvaccinated children, efforts are being successfully made to secure their vaccination before going out of the workhouse. There is no medical objection to this early vaccination, but the susceptibilities of certain persons who object to vaccination altogether are offended thereby.

The Guildford Rural Sanitary Authority having been called upon to provide proper outlet sewerage for the Charterhouse School at Godalming, and having refused to do so, has, after local inquiry, been declared by the Local Government Board in default under the 299th section of the Public Health Act, 1875, and ordered to provide the necessary sewerage. The Sanitary Authority has, however, refused to obey, and determined to submit the case to the opinion of counsel.

The report of Messrs. Crookes, Odling, and Meymott Tidy, to the Local Government Board, on the composition and quality of daily samples of the (filtered) water supplied to London from Jan. 20th to Feb. 19th, 1881, shows that although many of the samples examined were more or less turbid from finely suspended clay and sand, the water was, nevertheless, wholesome, of good quantity, and well oxygenated.

A person has recovered from his landlord, in the Greenwich County Court, £40 rent (paid in advance), and £10 expenses of removal for having let to him a house which proved most unwholesomely damp.

A correspondent using the signature "Medicus" writes to the public journals complaining that the public vaccinator of his district refused to revaccinate a daughter of his cook, aged ten and a half years. It is difficult to believe that any qualified medical man can be so grossly ignorant of the practice and law of vaccination as to have written this letter.

At the Leicester Borough Police Court last week, twenty-seven anti-vaccinationists were summoned for non-compliance with the Compulsory Vaccination Acts. Conscientious objections were urged in most cases, but the Bench inflicted in each case a fine of 10s., including costs, or seven days' imprisonment.

The Uxbridge magistrates have dismissed the summons taken out by the Thames Conservators against the Uxbridge Local Board for allowing the sewage of their district to flow into the Thames, the Bench regarding the evidence of the fact as insufficient. A case for a superior court was granted.

Of fourteen deaths from small-pox among children under five years of age reported by the Registrar-General last week, eight of the sufferers were known to have been unvaccinated, and there was no evidence as to the vaccination of five others.

Mr. Roland P. Blennerhasset, M.P., believes, apparently, that "cleanliness, ventilation, &c." would be sufficiently protective against small-pox. If other persons were not concerned, it is a pity he cannot be left in this belief.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

English urban mortality continues to decline, and is now very considerably below its average for the season. In twenty of the largest English towns, estimated to contain in the middle of this year nearly a third of the entire population of England and Wales, 5400 births and 3195 deaths were registered last week. The births exceeded by 214, whereas the deaths were 62 below, the average weekly numbers during 1880. The deaths showed a further decline of 72 from recent weekly numbers; and the annual death-rate, which had decreased from 31·0 to 22·4 in the four preceding weeks, further fell to 21·9 last week. The lowest death-rates in the twenty towns last week were 16·7 in Sheffield, 18·5 in Bristol, 18·7 in Portsmouth, and 19·0 in Leicester. The rates in the other towns ranged upwards to 24·1 in Newcastle-upon-Tyne, 25·9 in Manchester, 26·6 in Oldham, and 28·6 in Liverpool. During the past eight weeks of the current quarter the death-rate in the twenty towns averaged 25·0 per 1000, against 26·0, the average rate in the corresponding periods of the five years 1876–80.

The deaths referred to the principal zymotic diseases in the twenty towns, which had steadily declined from 390 to 315 in the five preceding weeks, did not exceed 290 last week; these included 76 from whooping-cough, 56 from scarlet fever, 45 from small-pox, and only 25 from fever, principally enteric. The annual death-rate from these principal zymotic diseases averaged only 2·0 per 1000 in the twenty towns, and ranged from 0·3 and 0·4 in Hull and Sunderland, to 2·7 and 3·1 in Leeds and Norwich. Scarlet fever showed the largest proportional fatality in Oldham, Portsmouth, and Leicester. The 13 deaths from diphtheria in the twenty towns included 8 in London and 2 in Birmingham. The death-rate from fever in the twenty towns was unusually low. Small-pox caused 49 more deaths in London and its outer ring of suburban districts, and one in Brighton, but not one in any of the eighteen other large provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily increased in the seventeen preceding weeks from 77 to 704, further rose to 752 on Saturday last, a higher number than has been under treatment in these hospitals since the spring of 1878. The number of new cases of small-pox admitted to these hospitals, which had been 176 and 183 in the two previous weeks, further rose to 187 last week. The Highgate Small-pox Hospital contained 49 patients on Saturday last, against 46 and 53 at the end of the two preceding weeks.

The deaths referred to diseases of the respiratory organs in London, which had steadily declined from 702 to 364 in the four previous weeks, were 367 last week, and 100 below the corrected average number in the corresponding week of the last ten years; 252 resulted from bronchitis, and 71 from pneumonia. The annual death-rate from lung diseases (excluding phthisis) was equal to 5·2 per 1000 in London; the rate from the same diseases was 8·7 in Liverpool.

BEST COPY AVAILABLE

The causes of 94, or 2·9 per cent., of the deaths in the twenty towns last week were not certified, either by a registered medical practitioner or by a coroner. The proportion of uncertified deaths was 1·8 per cent. in London, while it averaged 4·0 per cent. in the nineteen provincial towns. No uncertified deaths were registered last week in Portsmouth or Norwich, while their proportion was largest in Wolverhampton, Bradford, and Sheffield.

HEALTH OF SCOTCH TOWNS.

In eight of the largest Scotch towns, having an estimated population of rather more than a million and a quarter persons, the annual death-rate averaged 22·5 per 1000 last week, against rates declining steadily from 34·7 to 23·9 in the four preceding weeks; this rate was, however, 0·6 above the average rate in the twenty large English towns. The rates in the eight Scotch towns ranged from 16·5 and 21·1 in Greenock and Edinburgh, to 25·4 and 25·7 in Paisley and Aberdeen. The deaths referred to the seven principal zymotic diseases in the eight towns, which had steadily declined from 125 to 87 in the four previous weeks, further fell to 70 last week, and were equal to an annual rate of 2·8 per 1000, which was, however, 0·8 above the average rate from the same diseases in the twenty English towns. The zymotic death-rate in the eight Scotch towns ranged last week from 1·3 and 1·9 in Greenock and Perth, to 3·3 and 4·3 in Edinburgh and Leith. The 70 deaths from zymotic diseases included 17 from whooping-cough, 14 from diarrhœa, 14 from fever, 13 from diphtheria, 7 from scarlet fever, 5 from measles, and not one from small-pox. The 17 deaths from whooping-cough showed a further decline from recent weekly numbers, and included 8 in Glasgow and 3 in Dundee. The fatal cases of scarlet fever also showed a further decline, and 4 of the 7 were returned in Edinburgh. The deaths referred to fever, which had been 8 and 10 in the two previous weeks, further rose to 14 last week, and included 6 in Glasgow, 3 in Edinburgh, 2 in Leith, and 2 in Greenock; the annual death-rate from fever in the eight towns averaged 0·55 per 1000 last week, and was more than three times as high as in the twenty English towns. The fatal cases of diarrhœa were less numerous than in the previous week. The 13 deaths referred to diphtheria also showed a decline, and included 6 in Glasgow and 4 in Edinburgh. Four of the 5 fatal cases of measles occurred in Glasgow. The deaths referred to acute diseases of the lungs (bronchitis, pneumonia, and pleurisy), which had declined from 348 to 193 in the four preceding weeks, further fell to 150 last week, and were equal to an annual rate of 5·9 per 1000; the death-rate from the same diseases in London did not exceed 4·7 per 1000. The largest excess in the fatality of lung diseases in the Scotch towns occurred last week in Paisley and Perth.

HEALTH OF DUBLIN.

The rate of mortality in Dublin continues to show a marked excess compared with that prevailing in most of the large English and Scotch towns. The annual death-rate from all causes in the city, which had declined from 47·4 to 38·5 in the four preceding weeks, was equal to 38·1 last week. During the past eight weeks of the current quarter the death-rate in the city has averaged no less than 40·6 per 1000, against 24·5 in London and 23·0 in Edinburgh. The 245 deaths in Dublin last week were within one of the number in the previous week, and included 24, or nearly 10 per cent., which were referred to the principal zymotic diseases, against 22 and 31 in the two previous weeks. These 24 zymotic diseases included 10 from fever (typhus, enteric or typhoid, and simple continued), 4 from scarlet fever, 4 from whooping-cough, 3 from diarrhœa, and one each from small-pox, measles, and diphtheria. The annual death-rate from these zymotic diseases was equal to 3·8 per 1000 in Dublin last week, while it did not exceed 2·3 in London, and was 3·3 in Edinburgh. The deaths referred to fever, which had been 7 and 17 in the two preceding weeks, were 10 last week, and equal to an annual death-rate more than nine times as high as the average rate from the same cause last week in the twenty large English towns. The fatal cases of scarlet fever in Dublin showed a slight increase last week, while those of whooping-cough were less numerous. The deaths both of infants and of elderly persons exceeded the numbers returned in the previous week.

HEALTH MATTERS GENERALLY AT HOME AND ABROAD.

SALFORD INFECTIOUS DISEASES HOSPITAL.

There are few more important subjects connected with practical sanitation than the hospital treatment of infectious diseases in large towns. Dr. Tatham, in his valuable report on the sanitary condition of Salford in 1879, unfortunately only just issued, gives some valuable information bearing upon the work done during that year in the Wilton Hospital for Infectious Diseases belonging to the borough of Salford. This hospital now contains 70 beds for the isolation and treatment of infectious diseases, and we are told that the Town Council have decided not only to enlarge it by the erection of an administration department, but to secure its more complete isolation by the demolition of some neighbouring houses, and also to add at least twenty to the number of beds available for patients. We often hear as an argument against the erection of such hospitals that the prejudice against their use on the part of those for whom they are intended is so great as almost to defeat the object in view. At any rate this is not the case in Salford. It appears that between the opening of the hospital during 1876 and the end of 1878 no less than 868 cases were admitted, and that 307 cases were admitted during 1879. Thus the prejudice against hospital treatment in Salford, if it existed, seems in a fair way to be overcome. The 307 cases of admission during 1879 included two of small-pox, four of typhus, thirty-one of enteric fever, 157 of scarlet fever, sixty-two of measles, and one of diphtheria. The total cost of maintenance in the hospital during 1879 was little less than £3000, and was equal to 21s. 6d. per week for each inmate, including the officers of the institution; and as the average duration of each patient's residence in hospital was thirty-six days, it may be calculated that the average cost of each patient for maintenance was about £5. The number of completed cases recorded in 1879 was 313, of which 236 were recoveries and 77 deaths; thus the rate of mortality was equal to 24·6 per cent. of the completed cases, and exceeded the average proportion in such hospitals. The rate of mortality was equal to 16·6 per cent. among 42 cases of enteric fever; 25·6 per cent. among 156 cases of scarlet fever; and 21·3 per cent. among 61 cases of measles. With regard to enteric fever, the rate of mortality among 443 completed cases in the Metropolitan Asylum Hospitals during 1879 was 18·6 per cent., showing a difference of 2 per cent. in favour of the Salford Hospital. The fatality among the 1317 cases of scarlet fever treated at the Metropolitan Asylum Hospitals during 1879 showed a mortality not exceeding 16·2 per cent., against the high rate of 25·6 in the Salford Hospital. This excessive fatality of scarlet fever in Wilton Hospital may, in part, be due to the disease assuming a more virulent type in Salford than in London. The subject, however, is worth inquiry. The mortality among cases of measles is also undoubtedly great, and we hope that Dr. Tatham, in his next report, will give some further information on this point, which may show that the rates during 1879 were exceptionally high. Such variations may always be expected in dealing with small numbers.

MANCHESTER AND SALFORD SANITARY ASSOCIATION.

The annual report of the Committee of the Manchester and Salford Association for 1880, while showing that the Association is continuing its useful work, does not, unfortunately, show any tendency to resiliency in its funds. During the last few years the income of the Association has been gradually diminishing, owing to death and removal of former members and other causes, and now it is compelled to appeal to the public for pecuniary help if it is to continue its usefulness. Let us hope that the next annual report will show good results from the appeal. The sanitary inspection department has not been so successful as was anticipated.

HEALTH OF CALCUTTA.

Dr. M'Leod's report for the last quarter of 1880 on the health of Calcutta shows no very striking departure from the usual meteorology of the period; food plentiful and cheap, but a considerable mortality from disease generally. The mortality from fevers was below the average; that from cholera above. The autumnal cholera exceeded in amount

the spring cholera, "a very unusual circumstance." Wherever any tendency to grouping of the disease was observed, a special inquiry was made, and in all such instances the grouping was found around very filthy tanks. The arrangements for carrying out the new vaccination laws have been completed.

PLAGUE IN MESOPOTAMIA.

Information has reached the general press by a roundabout route through Russia that plague has broken out at Djaffar in Mesopotamia. Four deaths from the disease are reported.

It is hardly necessary to state that the announcement in an evening paper of the existence in Dublin at the present time of over 150 cases of typhus fever, from which disease "no less than seven doctors have died," is very far from being accurate. The only death in the ranks of our profession, of which we have received information, is the lamented one of Dr. Peele, a short obituary notice of whom will be found in our present issue.

Small-pox and scarlet fever are stated to be prevalent in Rio de Janeiro, and the outbreak of yellow fever has not yet subsided. Guayaguil is now reported to be free from the latter disease.

THE SERVICES.

THE AFGHAN HONOURS.

The *Gazette* of Tuesday, conferring honours and rewards on the officers who served in the late Afghan war, contains the names of four medical officers on whom Her Majesty has bestowed the distinction of Companion of the Bath. Deputy Surgeon-Generals Annesley Charles Castriot De Renzy, Stephen Chapman Townsend, of the Bengal Army; Deputy Surgeon-General Henry Bolton Hassard, and Brigade Surgeon James Arthur Hanbury, of the British Medical Service.

THE TRANSVAAL WAR.

A number of medical officers are under orders for South Africa to reinforce the medical staff in the Transvaal. Surgeon Coats embarked at Kingstown, on the 27th ult., in the transport *Calabria*, in medical charge of the 7th Hussars; Surgeon Woods, proceeding in charge of the left wing of the 7th Hussars, in the transport *Nemesis*. Brigade Surgeon Corbett, Surgeon-Major Joseph Watts, and Surgeon H. Scott have also embarked for Durban. Two officers of the Army Hospital Corps, with a detachment of thirty-five non-commissioned officers and men, are detailed for service, and will sail in a transport next week. Surgeon-Major Frederick B. Scott, M.D., has been appointed to the staff of Sir Frederick Roberts, G.C.B.

We deeply regret to announce the death, from wounds received in the recent action at Majuba Hill, of Surgeon-Major Cornish, A.M.D. He was the son of a much respected member of the profession, Dr. Cornish, of Taunton. We regret to learn that Surgeon Arthur J. Landon, A.M.D., is also amongst the list of officers killed in the battle near Lang's Nek, on Saturday last.

On Tuesday Sir Frederick Roberts called on Sir William Muir, Director-General of the Army Medical Department, in reference to the supply of further surgical appliances for use in the field, the authorities being in possession of information which leads them to believe that an extra supply is necessary. As a result a consignment of medical instruments and drugs will be sent in the *Balmoral*.

THE INDIAN MEDICAL SERVICE.

The new pension rules for the Indian Medical Service have, we understand, been approved by the Secretary of State for India, and will be promulgated very shortly. They will take effect from the 1st January, 1881, so that officers who are now retiring will benefit by the new terms, which will be liberal and comprehensive. Under the provisions of the Warrant of November 16th last for the Indian Medical Service twenty-one brigade-surgeons will be appointed in the Bengal Presidency—fourteen in Madras, and nine in Bombay. These promotions are to be made by selection from the list of surgeons-major on full pay. Their commissions will be antedated to 27th November, 1879, so as to harmonise with the British Service.

Lord Hartington has informed Mr. Cowan, M.P., as President of the Indian Medical Defence Fund, that a despatch has been received from the Government of India with reference to the recent changes in the Indian Medical Service, and is now under the consideration of the Secretary of State in Council. The correspondence will be shortly presented to Parliament.

CONVALESCENT DEPÔTS, INDIA.

Surgeon-Major Curtiss Martin is appointed to the Medical Charge of the Landour Depôt; Surgeon-Major J. Fergusson to the Medical Charge of the Darjeeling Depôt; Surgeon-Major Robert Lower to the Medical Charge of the Murree Depôt.

The undermentioned Medical Officers are attached for duty at the Convalescent depôts as under for the ensuing hot season: Surgeon J. F. Williamson, Nynee Tal; Surgeon-Major C. E. Smith, M.D., Landour; Surgeon A. W. Browne, Kasauli; Surgeon J. Boulger, Dalhousie; Surgeon-Major J. H. Moore, Murree.

Surgeon-Major J. H. Robothom and Surgeon H. A. Fogarty have been granted six months' leave from India on private affairs. Surgeon-Major J. H. Loch, Bengal Medical Service, has been granted furlough to Europe for fifteen months.

Surgeons-Major T. Butler Power O'Brien and Decimus F. de Hodgson sailed for Bengal in H.M. troopship *Malabar*, which left Portsmouth on the 4th inst.

Brigade-Surgeon S. A. Lithgow has been granted six months' leave from India on private affairs.

Surgeon-Major Edmond Townsend, M.D., Army Medical Department, is under orders to proceed to the West Coast of Africa for service on the Gold Coast in connexion with the threatened Ashantee war. Surgeons J. J. Lamprey and N. Cameron, M.D., have proceeded from Sierra Leone with the 1st West India Regiment to Cape Coast Castle for the expedition against the King of Ashantee.

ARMY MEDICAL DEPARTMENT.—Surgeon-General Henry Kendall, M.D., has been granted retired pay; Surgeon-Major Thomas Moriarty, M.D., who has been granted retired pay, to have the honorary rank of Brigade Surgeon; Surgeon-Major Samuel Flood retires on temporary half-pay.

BOMBAY MEDICAL ESTABLISHMENT.—To be Surgeon-Major: Surgeon John Robb, M.D.

ADMIRALTY.—The following appointments have been made:—Surgeon G. W. F. Armstrong, M.D., to the *Malabar*, vice Clarke; Surgeon Robert M'Ivoer to the *Monarch*, vice Bell.

INTERNATIONAL MEDICAL CONGRESS (1881).

PREPARATIONS for the approaching International Medical Congress are being vigorously pushed forward by the Executive Committee, and the arrangements are now beginning to take a more definite form. The inaugural address by Sir James Paget, the President-elect of the Congress, will be given in St. James's Great Hall, which has been already engaged for the purpose, on Wednesday morning, Aug. 3rd. The following mornings will be devoted to the business of the various Sections; while the afternoons (with the exception of Saturday afternoon, which will be left free for garden parties, excursions, &c.) will be occupied by the general meetings of the Congress, at which four addresses will be given by distinguished men of four nationalities. Three gentlemen have already promised to give these addresses: Professor Huxley, probably on "The Connexion of General Science and Medicine"; Professor Volkmann, of Halle, on "Modern Surgery"; and Dr. Billings, of Washington, on "Medical Literature." The fourth address, to be given by a distinguished Frenchman, has not as yet been finally arranged. The meetings of the various sections will be held in rooms at Burlington House, courteously placed at the disposal of the Committee by the University of London, the various learned societies, and the Royal Academy of Arts. This, however, not providing the required amount of accommodation, the Committee have engaged Willis's Rooms for the occasion, and four of the sections will hold their meetings there. As stated in an earlier notice, no less than 40,000 individual medical men in various parts of

the world received the original circular of invitation during August and September of last year, and since then the secretaries of the various sections have been actively engaged in circulating provisional lists of subjects which seemed in the opinion of the Committees of the sections those best suited for discussion and papers. Numerous replies have been received in answer to these communications, in some cases leading to alterations in the subjects selected. These amended programmes have again been distributed among those most likely to take interest in them, and are now combined into a pamphlet, and are issued together with the rules of the Congress printed in the three official languages to any medical man making application for them to the Secretary General.

Since the list of names published in November last, a large number of our foreign colleagues have definitely announced that they will come to the meeting, and there seems every prospect of the attendance from abroad being a full one. Meanwhile, depending on the number of names appearing as officially connected with the Congress, and on the subscription list, together with the number of gentlemen from abroad who have positively stated their intention to attend, a certain estimate of one thousand members may be made; and it seems not unreasonable to assume that at least double that number will attend.

The Reception Committee are busily engaged, and have decided upon giving an evening reception at South Kensington, and perhaps a second in the Albert Hall, but at present the state of the subscription list does not warrant them in making the arrangements definitive. The Lord Mayor purposes entertaining members of the Congress at dinner at the Mansion House on August 4th.

ST. THOMAS'S HOSPITAL.—MURCHISON MEMORIAL FUND.

Statement of Accounts.

RECEIPTS (including interest)				EXPENDITURE.			
	£282	13	8	Bust and pedestal	£148	0	0
				Printing	3	6	0
				Postage, wrappers, &c. ...	4	17	3
				Balance	126	10	5
					£282	13	8

H. H. CLUTTON, R. P. SMITH, } Auditors.
T. D. ACLAND, W. H. BATTLE, } Hon. Secs.

Feb. 24th, 1881.

The balance has been handed over to the Treasurers of the London Murchison Memorial Fund for the purpose of aiding in the formation of a Scholarship in Clinical Medicine.

GLASGOW ROYAL INFIRMARY.

THE annual meeting of qualified contributors and subscribers to this institution was held on January 31st. The report then submitted showed that 5117 patients had been admitted into the hospital during the year, being 195 less than in the previous year. The mortality in the medical wards was 12·7 per cent., in the surgical wards 6·4 per cent. The total mortality of patients treated to a conclusion was 9·3 per cent., or deducting 147 deaths which occurred within forty-eight hours after admission, 6·6 per cent. The number of patients treated in the dispensary was 21,232; of these, 10,515 were medical and 10,715 surgical. The treasurer reported that the total revenue, ordinary and extraordinary, amounted to £28,294 10*s.* 11*d.*; the total expenditure, ordinary and extraordinary, to £32,365 2*s.* 8*d.* The deficit of £4070 11*s.* 9*d.* was met by drawing on the capital account. The explanation given as to the increased expenditure of recent years is of considerable interest, as it shows the progress made in the management of such institutions as the Royal Infirmary, and the more enlightened views which are beginning to prevail among managers and directors. It is stated, in the first place, that the whole nursing system, and the domestic arrangements generally, have been greatly improved. In 1861, when the accommodation supplied by the hospital was greatly increased by the opening of the new Surgical House, the number of nurses was 44, their wages were from 15*s.* to 17*s.* 6*d.* per month; they were inadequately fed; no regular meal, not even dinner, being provided for them; their food consisted chiefly of such articles as herrings, eggs, chops, cheese, &c., which they cooked in their respective wards, and they did all the scrubbing, cleaning, and washing connected with the wards. Now the number of nurses on regular duty in the same number of wards (31) is 62; these are divided into two classes, day and night nurses. One of each class is appropriated to each ward, and her services are reserved exclusively for the physician or surgeon of the ward to which she belongs. There are also 29 probationer-nurses, who may be called the floating staff; one of these is placed as an assistant in each ward. There are 20 scrubbers and cleaners constantly employed, and 16 washerwomen and laundry-maids. The probationer's wages is £12 a year; after she is qualified she receives £20, which increases at the rate of £2 a year till it reaches £30. Thus the amount paid as wages to nurses and other officials has risen since 1862 from £2648 to £6000. The expenditure on medicines and medical and surgical appliances has also increased from £810 to £2580. Provisions have risen in price, and the diet scale has been improved all round. The results of this liberal policy have been very satisfactory. A better class of women have come forward as nurses, and a most marked improvement has taken place in the general tone of the institution. The death-rate has also fallen in a remarkable degree. In the five years from 1861 onwards the average annual deaths were 623; in the last five years they averaged 478; in the last four years only 468. Much money has been spent in adding to the accommodation of resident assistants, nurses, and others connected with the establishment. There still remain to be provided additional and better sleeping apartments for the nurses, and plans are now under consideration for an extensive range of dispensary buildings to be erected at the back of the hospital. In these new buildings ample space is provided for the medical school associated with the dispensary. The managers concluded by stating that the expenditure, though undoubtedly great, contrasted favourably with that of other similar institutions, and that it could not, with due regard to efficiency, be reduced.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Commons on Friday, further petitions for redress in connexion with the East India Army Medical Department were presented from Messrs. J. Anderson and A. S. Reed. On the motion of Mr. Woodall, the Blind and Deaf Mute Children Bill was read a second time. The second reading of the Coroners (Ireland) Bill, which is "blocked" by a notice of opposition from Mr. Warton, was further deferred for a week.

Scotch Medical Qualifications.

On Monday Sir Trevor Lawrence asked the Vice-President of the Council if he was aware that the highest qualification of the Royal College of Surgeons, Edinburgh—viz., the Fellowship—is to be had without examination, and even *in absentiâ*, by persons holding lower qualifications, on payment and by a process of vote by ballot; if he was aware that the highest qualification of the other two Scottish medical corporations—viz., the Royal College of Physicians, Edinburgh, and the Faculty of Physicians and Surgeons, Glasgow—is given on similar terms; and if he could inform the House whether such a system has ever been the subject of representation or remonstrance by the General Medical Council.—Mr. Mundella: I have reason to believe that, with regard to the Royal College of Surgeons of Edinburgh, a Fellowship can be obtained by persons who are already members of the Colleges of Surgeons in England, Scotland, or Ireland, upon the terms stated; but I understand that Fellowship is not a licence or qualification for practice, but is a distinction conferred by the College by a three-fourths vote. With regard to the Faculty of Physicians and Surgeons of Glasgow and the Royal College of Physicians, Edinburgh, I have not yet been able to obtain certain information. With respect to the question of so-called higher titles, I understand it was discussed by the

Medical Council in 1859, and it was then decided that in the opinion of the Council in future no licence or degree should be given by any of these bodies without examination; and in the year 1870 the subject was again brought forward in reference to Clause 16 of the Medical Act Amendment Bill, but in consequence of the withdrawal of the Bill and pending further legislation, the subject has not been at present renewed. The question of these higher titles will form part of the inquiry into the working of the Medical Acts which the Government propose to shortly institute. A petition for inquiry into the East India Army Medical Department was presented from Alexander Campbell.

Medical Reform.

On Tuesday, in reply to Mr. Errington, Mr. Mundella stated that the Government had arrived at the conclusion that they should best attain a satisfactory investigation of the subject of medical reform by referring it to a Royal Commission.

Workhouse Vaccination.

Mr. Hopwood asked the President of the Local Government Board whether it was true that a practice of vaccinating infants as early as the first week after birth, "and even earlier,"(!) has been adopted in some workhouses. If it was done under the sanction of the Local Government Board; and was the free consent of the mother in these cases first obtained. Mr. Dodson said it was quite true that the practice of vaccinating children in the first week after birth had been adopted in some workhouses, and in some individual cases the operation had been performed even earlier than the completion of the first week. But, in the circular recently issued by the Local Government Board, it had been pointed out that it was desirable that children should be vaccinated when six days old in order that the result might be ascertained before the thirteenth day—that was, before the mothers left the workhouse, which was often at a very early period. If the vaccination of children born in workhouses was not performed before they left they would probably not be vaccinated at all, and thus add to the large number of children in the metropolis who escaped vaccination altogether. No complaint had reached him with regard to the result of these operations. He was asked if the free consent of the mother was in all cases at first obtained. In many cases the free consent of the mother to the vaccination of the children had been specially obtained; in other cases where it had not been asked for, acquiescence, in the absence of objection, had been assumed. (Mr. Hopwood: "Oh!") He was not aware of any instance where a child had been vaccinated after the refusal of the mother.

Revaccination.

Mr. Firth asked the President of the Local Government Board whether he was aware that, owing to the increase of small-pox in Western London, many inhabitants were being revaccinated; and whether, having regard to the fact that no lymph can be obtained from secondary vaccination and that great difficulty exists in obtaining lymph, he was prepared forthwith to provide a proper supply of calf vaccine or humanised lymph for all duly qualified persons applying for the same. Mr. Dodson replied that there could be no doubt that owing to the prevalence of small-pox in the west of London many persons were being revaccinated. Although no doubt it was very desirable that everyone should be revaccinated, it would have been much better in many cases that, instead of waiting for this epidemic, they had been revaccinated as the Board had recommended. With regard to the supply of lymph, it must be borne in mind that the National Vaccination Establishment was intended to supply lymph to registered practitioners, not to individuals, and he was not aware of any case in which a registered practitioner had applied for lymph and had failed to obtain it. With regard to the last portion of the question, he might state that arrangements were in progress for providing a supply of calf vaccine, but considerable difficulty would be experienced in organising the necessary establishment. He could only hope that the arrangements would shortly be made.

Trichinosis.

Mr. Dixon-Hartland asked the Vice-President of the Council whether he had been informed of the prevalence of trichinosis amongst swine at Chicago, and was aware that large quantities of pork, ham, bacon, &c., are exported from that city to this country. Whether he was further aware that the French and other Governments have, in consequence, prohibited the importation of pork from the United States. And whether, in view of the deadly character of the disease propagated by the consumption of diseased meat, two deaths having been reported from Dublin within the last few days, he had taken any, and, if so, what steps to ascertain if any infested meat had been imported into the United Kingdom; and if not, what steps he was prepared to take to prevent such importation. Mr. Mundella said the Privy Council had no evidence of the prevalence of trichinosis in swine at Chicago. That place was merely the centre to which hogs were sent to be cured from the surrounding districts before being sent to this and other countries. He understood the disease could not be detected in the living animal, and generally only by microscopical examination of the flesh. He was aware that the importation of American pork had been prohibited in France, but the importation in that country was only one-twelfth of the import to this country. Italy, France, Portugal, and Spain prohibited the import two years ago, but those countries were self-sustaining countries, and not dependent, as we are, on foreign supplies. It was only right to say that no facts had been brought to his knowledge to justify any alarm on the subject. With respect to the prevalence of disease in dead animals, the Local Government Board were responsible. The Privy Council only dealt with disease in living animals, but he must say that the prohibition of such an enormous food-supply would only be justified by the most urgent necessity. With regard to the deaths in Dublin, there was no evidence to show that the deceased died from trichinosis, or that they had been in the habit of eating American pork.

A petition was presented from Falkirk for inquiry into the subject of medical relief in Scotland. Lord F. Cavendish, in reply to Captain Maxwell Heron, stated that the Government proposed to insert in the estimate an increased grant in aid of the medical relief in Scotland. The return recently ordered, on the motion of Mr. A. O'Connor, of examinations in London for the naval medical service, was presented. Colonel Alexander was discharged from further attendance on the Select Committee on the Contagious Diseases Acts; and Colonel Tottenham was added to the committee in his place. Sir Herbert Maxwell fixed the 29th inst. for the discussion on spurious American compounds, sold as butter, upon which he will move the following resolution:—"That it is desirable that such steps shall be taken by the Legislature as will ensure, as far as possible, that such of these compounds as are harmless shall only be sold under distinctive names, and that the importation and sale of those which are hurtful or dangerous to health be prohibited altogether." Mr. Dixon-Hartland gave notice that on an early day he will call attention to the danger of trichinosis arising from the importation of American pork, and move a resolution.

Fulham Small-pox Hospital.

Mr. Firth gave notice of the following questions for Thursday:—To ask the President of the Local Government Board, whether it is the fact that Fulham Small-pox Hospital is now made the receptacle for more than one-third of the small-pox patients of the whole of London; whether the borough of Chelsea, which includes the whole of Kensington, Notting-hill, Fulham, Chelsea, and Hammersmith, have volunteered to take charge of their own small-pox patients; whether the Metropolitan Asylums Board and the Local Government Board have not declined to confine the said hospital to such district; whether the Local Government Board do not decline to receive a deputation to urge such limitation; whether, according to the decision in a recent case, a small-pox hospital is not a nuisance *per se*, which may at any time be stayed by injunction; whether he is aware that the inhabitants of Western London, in consequence of such refusal as aforesaid, propose to take legal proceedings to obtain such injunction; and whether, in order to save public money being wasted in fruitless legislation by the Metropolitan Asylums Board in defending such proceedings, he is prepared forthwith to advise such Board to close Fulham Small-pox hospital, and to remit the patients to the care of local authorities, or otherwise to abate such nuisance.

On Thursday, in answer to Mr. Firth, Mr. Dodson said, the notice of the hon. member contains no less than seven questions. I will endeavour to answer them as concisely as I can. My answer to the first question is, that it is not a fact that Fulham Small-pox Hospital is made a receptacle

for more than one-third of the small-pox cases in the metropolis. The total number of patients in the hospitals is 763, of whom 217 are in Fulham. The answer to the second is, that I have not received any offer from the borough of Chelsea to take charge of their own small-pox patients. The borough has no power to undertake any such charge, and the vestries of the several parishes in the borough have not provided any hospital for such cases, although express power was given them to do so as far back as 1866, and they have from time to time been reminded of it. The answer to the third question is, that the hospitals of the Metropolitan Asylums Board, of which Fulham is one, were provided for the whole metropolis, at the cost of the ratepayers generally, and so long as there are space and accommodation admission will not be refused to patients coming from any part of that area. In answer to No. 4, I have to say that the answer to No. 3 will afford a reason why it is useless to receive a deputation on the subject. As to whether, according to the decision in a recent case, a small-pox hospital is not a nuisance *per se*, which may at any time be stayed by injunction, I have to say that it is now the subject of appeal in the House of Lords. I am not aware that the inhabitants of West London propose to apply for an injunction; and in reply to the last question I have to state that I am not prepared to advise the Metropolitan Asylums Board to close its hospitals, and to remit the small-pox patients generally to the care of the local authorities, especially seeing that the Vestries and District Boards have as a rule failed to provide asylums as they should have done—at all events for non-pauper cases, who form more than one-half of the cases.

Correspondence.

"Audi alteram partem."

ANEURISM TREATED BY THE USE OF THE CATGUT LIGATURE.

To the Editor of THE LANCET.

SIR,—The results of the cases whose history was read at the Medico-Chirurgical Society on Feb. 8th are so important that I think some review of them is necessary in the interests of surgery. The President said that the condition of artery revealed by post-mortem examination was unknown to him, and other speakers, myself among the number, proffered similar opinions. My remarks, however, indicated that I intended to devote further study to the subject, having at the time a suspicion, awaiting investigation, as to the reason of the non-closure in the lumina of the vessels.

This suspicion was awakened by the absence of clot, above or below the ligature, in either Mr. Adams's or Mr. MacCarthy's case. In studying the subject it is to be observed that although there were but two patients, yet there are three cases—(1) the right carotid, tied by Mr. Adams; (2) the right subclavian of the same patient, tied by Mr. Treves; (3) the left subclavian, tied by Mr. MacCarthy. In Mr. Treves's deligation considerable suppuration took place; and the vessel is the only one of the three which exhibited perfect closure, the operator attributing the difference between the result of his operation and of the previous one by Mr. Adams to the inflammation and thickening which took place around the artery which he had tied. The wound over the carotid (Mr. Adams') had not inflamed.

There is, however, another factor. So many vessels have now been tied successfully while asepticism has been maintained that we can hardly go back upon that improvement and consider it a detriment. We must think of other matters, and more especially the singular absence of clot. Now, if the carotid artery tied by Mr. Adams, or the left subclavian tied by Mr. MacCarthy, had really been closed by the ligature (even though none of the tunics were divided), and if those vessels had remained occluded, as clinically appeared, in the one case for thirty-six days, and in the other for forty-one days, clot would have formed above and below the ligature, and would in that time have become so adherent that no restoration of passage could have been possible.

The condition must then, I think, be otherwise explained. Mr. Adams tied the carotid thus: "A stout catgut ligature was used and tied in a double, and then a single hitch." Mr. MacCarthy kindly answered a question I addressed to him by letter thus: "The ligature was tied with a double hitch, and then a single one, only differing from the ordinary knot by the doubling of the first hitch." Therefore, out of the three cases the only one which was tied by a single hitch repeated was Mr. Treves's operation on the right subclavian, and it was the only one which succeeded in occluding the artery.

If a piece of prepared catgut be drawn through the fingers, it will rarely be found to be smooth, but to be roughened by little asperities studded over the surface. These are not sufficient to obstruct in a knot made with single hitch. As soon as I came home from the meeting specified, I tied, with double hitch, a number of knots round different arteries, and I found that these roughnesses sufficed in the intensified friction thus produced to render the tightening of the first knot difficult and even uncertain. In one or two instances the sense to my hand was that of having tied the experimental object tightly, the loop being afterwards found evidently lax.

This, however, is only the hypothetical explanation; the fact remains that two out of the three cases were tied with the double hitch, and in those two occlusion either did not take place or was very transitory.

I am, Sir, your obedient servant,

RICHARD BARWELL, F.R.C.S.,
Senior Surgeon and Lecturer on Surgery,
Charing-cross Hospital.

George-street, Hanover-square, Feb. 15th, 1881.

To the Editor of THE LANCET.

SIR,—That an artery may be temporarily occluded by the use of the catgut ligature, and may then again become pervious, is the main point demonstrated by Messrs. Treves and MacCarthy's cases brought before the Royal Medical and Chirurgical Society on Feb. 8th. The inference, however, as to the bearing of this fact upon the treatment of aneurism should be, I venture to think, somewhat different from that drawn by the writers of the papers alluded to, and by the speakers on those papers. To them the temporary nature of the occlusion (even though in Mr. Treves's case the period of occlusion was eighteen days) seemed an argument of overwhelming force against the use of the catgut ligature in such cases. To them it seemed an essential point in the treatment of aneurism by the ligature that the artery ligatured should be obliterated. But is this so in all cases? Does not Mr. Treves's case present an instance in the opposite direction? The aneurism for which the ligatures were used was cured, though the carotid afterwards became pervious. Still I am willing to allow that in cases of distal ligature we should aim at the absolute obliteration of the artery ligatured. It is, however, an open question whether in the cases requiring proximal ligatures the temporary nature of the occlusion is a fatal objection. That aneurism can be successfully dealt with by temporary obstruction of the channel of the artery on its proximal side has been proved by the many recorded cases of cure of aneurism by digital or mechanical pressure, kept up perhaps for six, eight, ten, or twelve hours. Why, then, should not *ligature-pressure* be as effectual? Have we not in the catgut ligature a means of employing temporary pressure, with as little risk to the patient, as by digital or mechanical pressure? If we could always ensure primary union of the wound by employing antiseptic dressings there is no doubt that the answer would be in the affirmative. Nevertheless, the increased probability of our getting primary union when the catgut ligature and antiseptic dressing are used makes this method a very much safer one than that of the hitherto orthodox plans. So that when digital or mechanical pressure cannot be used or has failed, we have the comparatively safe method of *ligature-pressure* to fall back upon. And in the term *ligature-pressure* I would include the plan of passing a catgut ligature round the artery without necessarily cutting through its two inner coats; the object being simply to bring together the inner surfaces of its channel and to retain them for a certain number of days in such apposition. I adopted this method successfully in a case of femoral aneurism—*ligature-pressure* by means of a catgut ligature was employed around the external iliac artery. Though the

wound did not heal by the first intention there was no accident following the operation, and the aneurism was completely cured. I am, Sir, yours obediently,

Henrietta-street, Feb. 15th, 1881. W. SPENCER WATSON.

THE CHLOROTIC MURMUR.

To the Editor of THE LANCET.

SIR,—Dr. Bramwell has asserted in the most categorical manner that "Naunyn, George Balfour, and others *deny* that the inorganic murmurs of chlorosis are *ever* arterial." It turns out that Naunyn has written nothing whatever on the subject; while the ultimately arterial character of the chlorotic murmur follows as a necessary corollary, from the dependence, as I suppose, of the primary murmur upon ventricular dilatation, and has been distinctly described by myself in your own journal, little more than three years ago, as occurring in the later stages of chlorosis. In these circumstances it seems to me that a simple apology for his carelessness would be more consistent with Dr. Bramwell's position than an attempt to defend himself by showing that others are also to blame. It is surely not too much to expect of a teacher of medicine and a writer on the "Diagnosis of Cardiac Murmurs," that he should at least know so much of the literature of the subject as will prevent him misrepresenting the views which he criticises.

Dr. Bramwell has also quoted at some length the opinions of Rosenstein, Sibson, and Hayden in support of the idea that reduplication of the second sound is produced by irregular contraction of the two ventricles, the left getting into diastole before the systole of the right is finished. It is difficult, however, to see how this theory can explain that "combination of double second sound with valvular inadequacy at the aortic orifice," which, according to Hayden, is not an infrequent occurrence. Neither is it easy to understand how a satisfactory solution could be found for any one of the many physiological and physical difficulties which are opposed to this view. It is quite needless to enter upon them now, because modern physiology has supplied us with an explanation of this phenomenon, which each one can investigate for himself, and which is not only sufficient but also consistent with both physics and facts. Ceradini has experimentally taught us that during a ventricular systole the segments of the arterial valves are not flapped back on the walls of the artery, but float within the blood current. They are maintained in equilibrium on the one hand by the axial stream escaping from the ventricle; and on the other by reflex currents originating at the exterior of this axial stream, which flow outwards and downwards against the arterial wall, from which they are reflected upon the posterior surfaces of the semilunar segments. Ceradini has also taught us that the moment the blood pressure within the artery equalises that within the ventricle, the semilunar segments of the arterial valve, no longer kept in equilibrium by opposing currents, fall together and close the arterial orifice. This systolic closure of the valves, as he terms it, is accompanied by an audible snap that initiates the second sound, which is only strengthened, but not produced, by any of the events accompanying the cardiac diastole. When the intra-arterial blood pressure is so great that it equalises that within the ventricle before the systole of the latter is finished, then we have the systolic closure of the valves and its audible snap, separated by an appreciable interval from the diastolic snap (of the arterial systole), and thus we have a reduplicated second sound. The primary systolic snap occurs only in that artery the blood pressure within which is in excess—in mitral regurgitation this is, of course, the pulmonary artery,—while the diastolic snap is simultaneous in both. Thus we have reduplication of the second coming and going, with variations of the intra-arterial blood pressure, without any interference with the action of the heart, the systole and diastole of both ventricles continuing to be both regular and synchronous, any residual blood not sent into the artery finding its way backwards to the auricle. And we have also a perfectly efficient explanation of the concomitance of a reduplicated second, with free aortic regurgitation. It is only when we wander amidst a maze of opinions that we find the facts of cardiac pathology difficult to explain; so soon as we deal with them according to the laws of physics and in the light of experimental physiology, the obscurity disappears. I am, Sir, yours obediently,

Edinburgh, Feb 25th, 1881. GEORGE W. BALFOUR.

"OVARIAN DYSMENORRHŒA, WITH RETROFLEXION OF THE UTERUS."

To the Editor of THE LANCET.

SIR,—I am glad that a remark in a letter of mine, which you were so good as to publish, has elicited from Dr. Wynn Williams the statement that he does not know the termination of many of the cases which he has treated with his intra-uterine stem.

It is well known that many deaths have occurred after the use of intra-uterine stems, and I am not alone in having met with or heard of many cases in which prolonged illness followed the application of such instruments. (I refer in this statement to intra-uterine stems generally, and not to Dr. Wynn Williams's stem in particular; on the contrary, I regard that with which his name is associated as one of the least dangerous.) Remembering these cases, it has been with astonishment that I have heard Dr. Wynn Williams say that he has *never* seen any ill consequences from the use of his stem. This startling statement is now, I am glad to find, explained. Dr. Wynn Williams has not seen any bad results, because he has not inquired as to the subsequent course of all his cases. Is it not possible that some of those whom he has not followed up may have left off coming to him because they were too ill to do so?

Anteflexion is very often found without any symptoms, and symptoms associated with anteflexion do not necessarily depend upon it, and may often get well without alteration in the shape of the uterus. Therefore it is to be expected that any kind of treatment applied to a large number of cases of anteflexion associated with symptoms would, if not immediately fatal, occasionally be followed by apparent improvement.

The publication of isolated cases proves nothing, either as to the safety of the remedy, or its efficiency in removing symptoms. It is necessary that *every case* should be recorded, and not merely those who came back to thank their medical adviser for the good done to them.

I am, Sir, faithfully yours,

G. ERNEST HERMAN.

West-street, Finsbury-circus, E.C., Feb. 1881.

NOTE ON THE DIAGNOSIS OF CAVITY IN THE LUNG.

To the Editor of THE LANCET.

SIR,—In your issue of Dec. 18th, 1880, Mr. S. C. Smith of Halifax described a physical phenomenon which he had observed in two cases of cavity of the lung—namely, a sound, synchronous with the cardiac systole, which could be heard over the trachea, so loud in tone that it could be distinctly perceived at a distance of some inches from the patient.

In Mr. Smith's opinion this sound is "obviously produced by the impact of the contracting ventricle against a neighbouring cavity, expelling such a puff of air as to produce a sound in the bronchus and trachea."

Permit me to draw Mr. Smith's attention to the fact that the same physical sign has been observed and described by Professor Gerhardt of Würzburg, in whose "Lehrbuch der Auscultation und Percussion," third edition, p. 270, I find a passage of which the following is a translation:—"Very rarely one can hear over cavities, as in one case described by Cejka, and in another by myself, a systolic whistling murmur of high pitch. I could show at the post-mortem examination of the latter case that a dilated branch of the pulmonary artery which ran through the cavity probably gave rise to this bruit. Cavities situated near the heart often give rise to râles or to musical and metallic sounds synchronous with the heart's systole. Remarkable are the few recorded cases (I have personally had occasion to observe one instance) in which râles *synchronous with the heart's systole became so much louder in consequence of 'resonance,' that they were audible at a distance of several feet.*"

This extract from Gerhardt's "Lehrbuch" probably contains the correct explanation of the above-mentioned phenomenon, which is otherwise difficult to account for. In THE LANCET of Jan. 8th, Dr. Drummond of Newcastle has already pointed out that Mr. Smith's explanation is untenable, for the reason "that systolic contraction of the

ventricle means a diminution in the bulk of the heart." I think that the theory of increased resonance, the cavity itself acting as the resonator, also explains the cessation of the sound during inspiration which took place in Mr. Smith's cases, when the patient was breathing deeply or quickly; inasmuch as, under these circumstances, the conditions favourable to resonance may cease to exist.

I have recently had occasion to observe a similar symptom in a young lady suffering from the third stage of phthisis. Signs of cavity existed in the left apex, and another cavity could distinctly be made out in the right infra-clavicular region, giving a tympanitic sound on percussion, which changed its pitch according as the patient assumed either the recumbent or the erect posture; the sound was also modified by the opening and closing of the mouth. On auscultation, amphoric breathing, with large bubbling râles, could be heard, and at the same time a *systolic bruit*, which was present during inspiration and expiration, and was also distinctly audible over the trachea.

Bearing in mind what I saw personally at the very post-mortem above referred to by Gerhardt, I at once diagnosed in the case before me the presence of a dilated branch of the pulmonary artery, which had not as yet become impervious, lying across the cavity.

The patient died of profuse hæmoptysis in a few days; and although a post-mortem examination was not permitted, I think there can be no reasonable doubt of the correctness of my diagnosis, having regard to the peculiar termination of the case.

Your obedient servant,

SIEGMUND MORITZ, M.D.,
Assistant Medical Officer to the Manchester Royal Infirmary.

Manchester, Jan. 31st, 1881.

"A SLANDER REFUTED."

To the Editor of THE LANCET.

SIR,—Under this title the *Philadelphia Medical Bulletin* publishes in its January number a letter from Dr. S. D. Gross, in which he asserts that a statement made by me in your journal "is false in every particular."

The absence of clinical clerks and dressers in the Pennsylvania Hospital, Philadelphia, led me to make inquiries of the doctor who most courteously showed me round. His reply so surprised me that before leaving the hospital I asked the question again, to be sure that I was not mistaken. "I was assured" by this gentleman "that at Jefferson College, which is one of the leading medical schools in the country, *a man might take his degree in medicine without ever having seen a case.*"

I am surprised that Dr. Gross should call my statement false, and then endorse it himself. In the last paragraph of his letter he makes the supposition that I have taken a degree at Jefferson College "without ever having seen a case," and in proof that I am not a solitary or exceptional instance, he adds, "precious pearls are daily thrown before *such* swine in the ample amphitheatres of the Philadelphia hospitals."

If I or any other man can obtain the degree of M.D. at Jefferson College, Philadelphia, "without ever having seen a case," I think I may justly remark that "clinical study is apparently unnecessary," and in so doing make no reflection on "the standard of clinical teaching in Philadelphia hospitals." I am, Sir, your obedient servant,

London, Feb. 23rd, 1881. A. E. BROSTER, M.R.C.S. Eng.

IRELAND.

(From our own Correspondent.)

THE Bazaar recently held in the Ulster Hall, for the benefit of the Belfast Royal Hospital, has realised the handsome sum of £1073 12*s.* 11*d.* The collections held on Hospital Sunday for the same institution amounted to £330 10*s.* 11*d.*, which, although somewhat in advance of that obtained the previous year, yet must be regarded as a sum totally unworthy of a wealthy town like Belfast. This hospital recently received a donation of 100 guineas from Mrs. Lyons of London, "as a token of gratitude for kindness shown to her son." It appears that the young gentleman in question happened to be in Belfast amongst strangers, and was admitted to the Royal Hospital, in which he died, after ten days' illness, from typhoid fever. The concert held last week for the benefit of the Belfast Hospital for Diseases of the Skin realised £35 2*s.* 7*d.*

At the Cork Fever Hospital last year there was an increase of 284 patients under treatment, as compared with 1879. This increase accounted for the additional expenditure, which the committee of the hospital hope will be materially reduced by the next corporation grant. The mortality from typhus fever was equal to 14 per cent., and, excluding seven cases admitted in a moribund condition, an actual mortality of 11 per cent. was obtained, a result which compares very favourably with the returns from other institutions of a similar kind.

A case of successful ligature of the right subclavian and right common carotid arteries simultaneously, for aneurism of the arch of the aorta, under the care of Dr. J. Mansergh Palmer, surgeon to the Armagh County Infirmary, deserves record. The patient, a woman aged fifty, was admitted to hospital on Feb. 10th, 1880, having noticed a slight swelling close to the right sterno-clavicular articulation during the previous November. On the night of the 12th Dr. Palmer found her suffering from great difficulty of breathing, stridulous respiration, lividity of face and neck, coldness of extremities, and other symptoms which rendered an immediate operation absolutely necessary. She was removed to the operation room, the right common carotid artery was tied, and as the tumour did not appear to decrease and pulsation continued, the subclavian was also ligatured. On the 29th the carotid ligature came away, and on March 2nd the subclavian. On April 27th she left the hospital, both wounds being quite healed. Early in June she caught cold and was readmitted to the Infirmary, but refused to take any medicine. On June 14th hæmorrhage took place from the old cicatrix in the neck over the carotid vessel, being complicated with hæmoptysis, which also occurred on the following day, and on the 10th there was profuse hæmoptysis, and death supervened 125 days after the operation. A post-mortem examination showed that the aneurism involved not only the arteria innominata, but also the arch of the aorta, while at the posterior and left side of the arteria innominata was an opening communicating with the left vena innominata, which latter communicated with the trachea at one point and at another opened into the right lung.

A Local Government Board inquiry was held at Bangor last Saturday in reference to a petition from the Bangor Town Commissioners, as the urban sanitary authority, to be allowed to construct waterworks for supplying the town and district with water, and also for a proper sewerage scheme. The commissioners have applied for a loan of £14,000 to carry out the necessary works. At the inquiry Dr. Bolton, medical officer of health, and others, gave evidence as to the great necessity which existed for a water-supply, not only for domestic purposes, but for flushing the sewers when formed.

Dr. Alexander Duke, recently assistant-physician at the Rotundo Lying-in Hospital, has been presented by the students of that institution with a handsome timepiece, bearing a suitable inscription, and also a valuable gold locket from the nurses belonging to the hospital.

At a recent meeting of the students of the Catholic University Medical School it was resolved to appoint a committee to receive subscriptions from past and present students of the School towards the erection of a memorial to the memory of the late Dr. Cryan, who for twenty-seven years discharged the duties of Professor of Anatomy and Physiology in the Medical School.

A man named Creagh died from hydrophobia in the Tipperary Infirmary last week, having been bitten by a mad greyhound so far back as July, 1880.

At a coroner's inquest held last week in Dublin the following rider was appended to the verdict by the jury:—"We are of opinion that the Bill now introduced into Parliament, providing remuneration for coroners and giving them power to appoint deputy coroners, should be entertained by the Government, and we feel the metropolitan county coroners are inadequately paid, and should be provided with a deputy."

THE Duke of Connaught has consented to preside at the anniversary festival of the Hospital for Sick Children, Great Ormond-street, to be held at Willis's Rooms on Wednesday, March 16th.

Obituary.

EDWARD PEELE, M.K.Q.C.P.I., L.R.C.S.I.

IT is with great regret we record the untimely death of Mr. Edward Peele, of Dublin, which sad event took place on the 18th inst., from that scourge of the profession, typhus fever, after two weeks' illness, aged forty-three. The deceased was connected with one of the city dispensaries, and it was in the discharge of his professional duties that he contracted the disease from which he died. Educated for the musical profession, he afterwards turned his attention to medicine; and in 1872 obtained the licence in medicine of the College of Physicians, and the following year the diploma in surgery of the Royal College of Surgeons in Ireland. He was one of the medical staff of the Hospital for Diseases of the Throat, Physician to the Hospital for Incurables, a Demonstrator of Anatomy in the Royal College of Surgeons' Medical School, and Visiting Physician to the Coombe Lying-in Hospital. Mr. Peele was one who made many friends, and in private life his kind and genial disposition, with musical abilities of a very high order, combined to make him a general favourite. His remains were interred last Monday in Mount Jerome Cemetery, being accompanied to their last resting-place by a large number of his professional brethren and of the citizens of Dublin.

The Committee of Council of the Irish Medical Association, at a meeting held on Feb. 22nd, passed the following resolutions:—"That the Council of the Irish Medical Association have learned, with the deepest regret, of the untimely death of Dr. Edward Peele, a member of the Council, and they desire thus to record their sense of the loss sustained by the Association in the removal of one so loved and trusted." Resolved further—"That the Hon. Secretary to Council be requested to convey to the relatives of the deceased an expression of the sympathy felt with them in their bereavement by the members of the Council." The Committee of Council, after passing these resolutions, adjourned as a mark of respect to the memory of Dr. Peele.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiates of the College on March 1st:—

Griffiths, Herbert Tyrrell, Devonshire-place.
Holberton, Henry Nelson, Hampton, Middlesex.
James, Herbert Ellison Rhodes, Livermere Rectory, Bury St. Edmunds.
James, James Thomas, Llwnjack, Llandovery.
Jay, Melville Richard Hindmarsh, Fentiman-road.
Mathews, Sidney Robert Harvey, Bickley.
Milne, James Kershaw, Royal Infirmary, Manchester.
Mouritz, Arthur Albert, Richmond-street.
Nance, Henry Chester, St. Bartholomew's Hospital.
Shelswell, Oscar Berridge, Trinity-square.
Sutton, Samuel Walter, Richmond-terrace.
Thistle, Frederick Thomas, Vincent-terrace.
Thomas, John, Ystalyfera, Swansea.

BRITISH MEDICAL SERVICE.—The following is a list of candidates for appointments as Surgeons who were successful at the competitive examination in London on Feb. 14th:—

	Marks.		Marks.
Davies, A. M.	2020	Younge, G. H.	1675
Hubbard, H. W.	2000	Clements, W. G.	1670
Fitzsimon, P. C. C. ..	2000	Babtie, W.	1625
Noding, T. E.	2005	O'Brien, R. F.	1620
Yourdi, J. R.	1992	Thiele, C. W.	1610
Culling, J. C.	1960	Nichols, F. P.	1580
Hackett, R. J. D.	1955	Cox, T.	1570
M'Geagh, R. T.	1950	M'Laughlin, J.	1570
Trewman, G. T.	1910	Fowler, R.	1560
Johnston, H. H.	1900	Creagh, S. H.	1510
Wilson, E. M.	1900	Lambkin, F. J.	1500
Risk, E. J. E.	1895	Reade, W. L.	1490
Davies, J. D.	1880	Peard, H. J.	1475
Birrell, W. G.	1850	O'Grady, G. S.	1455
Dundon, M.	1840	Rennie, S. J.	1425
Lingard, T. R.	1830	Carmichael, J.	1405
Magrath, C. W. S. ..	1830	Farmer, E. D.	1390
Lane, A. V.	1780	Creagh, G. W. B.	1370
Beatty, J. W.	1740	Wilkinson, F. T.	1370
Weston, G. E.	1695	Semple, J.	1345

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Feb. 24th:—

Sicard, William Edgar, Trinidad.
Young, James Vance, Maharafelt, Ireland.

The following gentlemen also on the same day passed the Primary Professional Examination:—

John Davies, Guy's Hospital; Arthur Dening, Queen's Hospital, Birmingham.

THE Baroness Burdett-Coutts has contributed £50 towards the funds of the Parkes Museum of Hygiene.

THOMAS HAMILTON MOORHEAD, M.D., of Errigle, Cootehill, has been appointed to the Commission of the Peace for the county Cavan.

CAMBRIDGE UNIVERSITY.—On the 24th ult. the degree of Bachelor of Medicine was conferred on Henry Richard Hutton, St. John's.

MR. W. INGLIS MASON of the Snelbury Union, Suffolk, has received the Government grant for successful vaccination (fourth time).

THE governors of the bequest of the late Mr. H. Heywood (who left about £26,000 for the benefit of the sick poor of Bursiem) have appointed a committee to inquire and report as to a site upon which a hospital can be built.—*Charity Record.*

AT the meeting of the Ophthalmological Society, on the 10th inst., the Discussion on the Relation between Optic Neuritis and Intracranial Disease, of which notice has been given, will take place. Dr. Hughlings Jackson will introduce the subject, and Dr. Stephen Mackenzie, Mr. Hutchinson, Dr. Buzzard, Dr. Greenfield, Mr. Walter Edmunds, Dr. Gowers, Dr. Brailey, and others are expected to speak.

MIDDLESEX HOSPITAL.—The report read at the annual meeting of the subscribers of this institution gave a gloomy account of its financial condition. It was intimated that unless the coming year witnessed an improvement in this respect, it would be necessary to temporarily close one male and one female ward. It is sincerely to be hoped that such a step may be averted by the timely generosity of the public.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest*

ACLAND, T. D., M.B., M.R.C.S.E., L.R.C.P., has been appointed House-Physician to St. Thomas's Hospital.

ANDERSON, H., M.B., C.M., has been appointed Medical Officer to the Bellinge District of the Wigan Infirmary.

ARCHER, E. J., B.A., M.B., M.Ch., has been appointed a Surgeon to the Oddfellows' Club, Southampton.

BEEVOR, W. C., M.B., M.R.C.S.E., has been appointed House-Surgeon to Newark-on-Trent Hospital, vice J. Reckett, resigned.

BUTLER, H. P., M.R.C.S.E., L.R.C.P., has been appointed House-Surgeon to St. Thomas's Hospital.

CARPENTER, A. B., M.R.C.S.E., L.R.C.P., has been appointed House-Surgeon to St. Thomas's Hospital.

COLLIER, M. P. M., M.R.C.S.E., L.R.C.P., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

ELLIS, J. L., L.K.Q.C.P.I., has been appointed Medical Officer for the Mallwyd District of the Dolgelly Union.

EXHAM, A. R. F., M.B., B.Ch., L.M.K.Q.C.P.I., has been appointed Medical Officer to the Fifth District of the Drayton Union.

FIRMAN, C. G., L.F.P.S.G., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Hatfield District of the Dunmow Union.

FLETCHER, J. S., M.D., M.R.C.S.E., L.S.A.L., has been reappointed Honorary Physician to the Hospital for Consumption and Diseases of the Throat, Manchester.

GARMAN, J. C., L.R.C.P.Ed., L.R.C.S.Ed., L.S.A.L., has been appointed Assistant Medical Officer to the Highgate Infirmary, vice E. C. Cripps, M.R.C.S.E., L.R.C.P.L., resigned.

HODGKINSON, A., M.B., C.M., has been reappointed Honorary Physician to the Hospital for Consumption and Diseases of the Throat, Manchester.

HOVELL, T. M., F.R.C.S.Ed., has been appointed Surgeon to the Throat and Chest Hospital, Golden-square.

HUTTON, H. R., M.B., L.S.A.L., has been appointed House-Physician to St. Thomas's Hospital.

JEFFREYS, R., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Districts of Brampton and Walton, Chesterfield Union.

JONES, Mr. E. W. T., has been reappointed Public Analyst for the Borough of Wolverhampton for one year.

JONES, J. Ff., L.F.P.S.G., L.R.C.P.Ed., L.S.A.L., has been appointed Medical Officer for the Llanegryn District of the Dolgelly Union.

KNIGHTS, Mr. J. W., has been reappointed Public Analyst for the Borough of Cambridge till Jan. 1st, 1882.

LLOYD, T. F., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Second District of the Reigate Union.

LUNN, J. R., L.R.C.P., M.R.C.S.E., L.S.A.L., has been appointed Resident Accoucheur to St. Thomas's Hospital.

PHILLIPS, L. W. K., M.R.C.S.E., L.S.A.L., has been appointed Resident House-Surgeon to the Western Branch of the Brighton and Hove Dispensary, vice Buckle, resigned.

POOLEY, T. A., B.Sc., F.C.S., has been appointed Public Analyst for the County of Essex.

POTTER, H. P., F.R.C.S., L.S.A.L., has been appointed Medical Officer for the Workhouse and Infirmary of St. Mary Abbotts', Kensington.

SMITH, R. P., M.B., B.Sc., L.R.C.P., M.R.C.S.E., has been appointed Demonstrator of Practical Physiology in the St. Thomas's Hospital Medical School.

SOUTHEY, A. J., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer for the Harmondsworth District of the Staines Union.

STEWART, T. G., M.D., F.R.C.P.Ed., has been appointed Consulting Physician to Heriot's Hospital, vice Sir R. Christison, resigned.

SWALE, H., M.R.C.S.E., L.R.C.P., has been appointed Junior Assistant House-Physician to St. Thomas's Hospital.

VINRACE, F., M.R.C.S.E., has been appointed House-Surgeon to the Queen's Hospital, Birmingham, vice J. W. Moore, resigned.

WADE, A. B., M.B., C.M., M.R.C.S.E., L.S.A.L., has been appointed a Surgeon to the Oddfellows' Club, Southampton.

WALTERS, L. R., M.R.C.S.E., L.S.A.L., has been appointed Senior Assistant House-Physician to St. Thomas's Hospital.

WHITE, P., M.B., C.M., M.R.C.S.E., has been appointed Senior House-Surgeon to the Halifax Infirmary.

WINTERBOTTOM, A. T., M.R.C.S.E., L.R.C.P.Ed., L.M., has been appointed Resident Obstetric and House-Surgeon to St. Mary's Hospital, Manchester, vice Wm. Walter, M.D., elected Honorary Surgeon.

YOUNG, A. H., M.B., C.M., has been appointed Honorary Surgeon to the Hospital for Consumption and Diseases of the Throat, Manchester.

Births, Marriages, and Deaths.

BIRTHS.

GRAYSON.—On the 25th ult., at The Poplars, Rayleigh, the wife of F. Dorrell Grayson, M.R.C.S.E., of a son.

TAYLOR.—On the 26th ult., at Champion-park, Denmark-hill, the wife of William Bramley Taylor, Esq., of a daughter.

WALKER.—On the 23rd ult., at Shrubland House, King Edward-road, Hackney, the wife of W. Newman Walker, jun., Esq., M.R.C.S.E. &c., of a daughter.

MARRIAGES.

ALLSHORN—WHITEHEAD.—On the 22nd ult., at St. Andrew's Church, Sheffield, by the Rev. E. B. Chalmers, D.D., assisted by the Rev. F. W. Goodwin, M.A., Adolph H. Allshorn, M.D., of 93, Dalston-lane, London, to Feronce Ada, third daughter of the late William Whitehead, Esq., of Sharrow Head, Sheffield.

BUCKLE—WHEELER.—On the 1st inst., at Londwater Church, by the Rev. W. P. Woollcombe, Vicar, assisted by the Rev. F. B. Ashley, John Buckle, M.R.C.S.E., of Great Bardfield, Essex, to Katherine, daughter of the late Henry Wheeler, Esq., of Beechwood, Londwater, Wycombe.

GREATHEAD—MERRIMAN.—On the 25th January, at Uitenhage, Cape of Good Hope, John Baldwin Greathead, M.B., of Grahamstown, to Esther Louisa Merriman, youngest daughter of the Bishop of Grahamstown.

RENDLE—BIRT.—On the 26th ult., at St. Mary's, Bryanston-square, George, eldest son of William Rendle, F.R.C.S.E., of Treverbyn, Forest-hill, to Emily Mary, eldest daughter of the late Daniel Birt, of Lee.

SPENCE—BENNETT.—On the 22nd ult., at St. Matthew's, Redhill, James Beveridge Spence, M.D., Medical Superintendent of the Burntwood Asylum, near Lichfield, to Elizabeth Roebuck, eldest daughter of Richard Bennett, Esq., of Redhill, Surrey.

DEATHS.

AVENT.—On the 21st ult., at Lansdown-place, Plymouth, Nicholas Avent, M.R.C.S.E., late of H.M. 66th Regiment, and son of the late Nicholas Bastard Avent, Surgeon, of Modbury, Devon, aged 46.

BURN.—On the 20th ult., at The Cedars, Shirley, Southampton, of heart disease, George Burn, M.D., C.B., Inspector-General of Hospitals and Fleets (Retired), aged 70.

MACKENNA.—On the 24th ult., at Great Marlborough-street, John William MacKenna, Esq., M.D., L.F.P.S., L.M., in his 78th year.

THOROLD.—On the 24th ult., at Windsor Villas, Plymouth, Ellis Frederick Thorold, Esq., M.A., M.D., eldest son of the Rev. Henry Bangh Thorold, of Hougham-cum-Marston, Lincolnshire.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, March 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor W. H. Flower, "On the Anatomy, Physiology, and Zoology of the Cetacea."

ROYAL INSTITUTION.—5 P.M. General Monthly Meeting.

MEDICAL SOCIETY OF LONDON.—7 P.M. General Meeting for the Election of Officers and Council.—8½ P.M. Ordinary Meeting, when Dr. C. Theodore Williams will read a paper "On the Pathology and Treatment of Diarrhœa in Phthisis;" and Mr. J. C. Wordsworth, "On some Defects of Sight, said to be due to Railway Accidents."

Tuesday, March 8.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Edward A. Schäfer, "On the Blood."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8 P.M. Dr. Hilton Fagge, "On a Probable Cause of Lead Colic."—Mr. Barwell, "On Experience and Specimens of the Ox Aorta Ligature, and some Remarks on the Variability of Catgut."

Wednesday, March 9.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1 P.M.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor W. H. Flower, "On the Anatomy, Physiology, and Zoology of the Cetacea."

HUNTERIAN SOCIETY.—7.30 P.M. Council Meeting.—8 P.M. Mr. Clement Lucas, "On Cases of Trephining."—Dr. Herman, "On Prolapse of the Ovaries."

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. A. D. Michael, "On a Species of Acarus believed to be unrecorded."

SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND SCIENCES.—Mr. William Arnot, "On Improvements in the Treatment of Esparto for the Manufacture of Paper."

Thursday, March 10.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

ROYAL INSTITUTION.—3 P.M. Rev. W. Houghton, "On Cuneiform Characters."

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8 P.M. Microscopical Specimens.—8.30 P.M. Discussion on "The Relation between Optic Neuritis and Intracranial Disease," to be opened by Dr. Hughlings Jackson.

Friday, March 11.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor W. H. Flower, "On the Anatomy, Physiology, and Zoology of the Cetacea."

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Gulstonian Lectures: Dr. Coupland, "On Anæmia."

ROYAL INSTITUTION.—5 P.M. Prof. R. S. Blackie, "On the Language and Literature of the Scottish Highlands."

CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Berkeley Hill, "On a Case of Fracture of the Spine treated with Sayre's Jacket."—Mr. Barwell, "On a Case of Excision of the whole Tongue by means of a small Supra-hyoid Wound, with remarks on the best material for the Loop of Ecraseurs."—Mr. Berkeley Hill, "On a Case of Round-celled Sarcoma, in which no repetition of the Disease took place during the remainder of the Patient's Life—namely, six years after the Operation."—Dr. Radcliffe Crocker, "On a Case of General Bronzing of the Skin without Constitutional Symptoms."—Mr. R. W. Parker will show (1) a Child with Pulsating Tumour on the Forehead, and (2) Three Brothers with Undescended Testicle.

Saturday, March 12.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. R. S. Poole, "On Ancient Egypt."

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, March 3rd, 1881.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 25	30·16	E.	37	34	..	39	34	..	Overcast
,, 26	29·90	E.	33	31	..	42	29	..	Bright
,, 27	29·92	E.	36	35	..	39	36	..	Snowing
,, 28	29·74	N.E.	33	..	..	35	27	..	Overcast
Mar. 1	30·07	W.	38	..	..	42	24	..	Bright
,, 2	30·25	S.W.	32	..	..	43	25	..	Overcast
,, 3	30·16	E.	38	35	..	41	31	..	Overcast

Notes, Short Comments, and Answers to Correspondents.

THE present issue of THE LANCET is the **three-thousand-and-first** number, the thirty-sixth of the **fifty-eighth year** of its publication.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Local papers containing reports or news-paragraphs should be marked.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Lectures, original articles, and reports should be written on one side only of the paper.

We cannot prescribe, or recommend practitioners.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

Mr. A. G. Chitty.—We are sorry that the printed reports do not include the points raised by our correspondent, on which the coroner seems to hold peculiar views.

Mr. Roger Hughes.—Consult Murchison on "Diseases of the Liver," Dickinson on "Diseases of the Kidney," and other such authorities. Dr. Richardson's works, of course, bring a heavier accusation against "alcohol and its effects on the human system."

A. B.—The prefix mentioned belongs properly only to graduates of a university, and there is no probability of any legislation altering this state of things.

B. H. H., B. W. A., and *Junior* have not enclosed their cards.

PARTIAL DISLOCATION OF THE HEAD OF THE HUMERUS FORWARDS.

To the Editor of THE LANCET.

SIR,—On the evening of the 5th inst. I was called to a female patient, aged thirteen years, who had the same morning fallen downstairs. She complained of pain in the right shoulder. The symptoms elicited by examination were slightly limited movement, she being able to raise the arm outwardly almost to the horizontal, but could not approximate it to the side nearer than about five inches, any forward movement being painful. The length from acromion to external condyle of humerus was not appreciably different from that of the opposite side. A slight prominence existed on the front of the shoulder, less than might even have been accounted for by a sprain, but more defined, as if the result of a contusion. There was, however, no discoloration. By grasping the limb above the elbow with the right hand, the shoulder being embraced firmly above by the left hand, two fingers in front, the thumb behind, slight pressure caused the head of the bone to at once slip into its place. The movement of the head of the humerus on reduction was unmistakably evident both to myself and to the patient, the functions of the joint being immediately restored.

The only cases I remember to have seen described are two—one by Mr. Le Gros Clark, and the other by Mr. Smith. Since the condition appears to be a rare one, whose existence was at no very distant date disputed, perhaps you may think the present case worthy of record.

I am, Sir, yours, &c.,

Gorton, Feb. 7th, 1881. EDWD. KENNEDY.

THE FROST OF JANUARY, 1881.

A PAPER was read at a recent meeting of the Meteorological Society by Mr. William Marriott, F.M.S., on the frost of January of the present year. The author pointed out that the severe frost of the 7th to the 26th was remarkable for its unexpected appearance, its long continuance, and its sudden breaking up. The weather during the first week of January was comparatively mild, but frost set in over the north of Scotland on the 8th. The author then gave the lowest thermometrical readings from about 300 stations in the United Kingdom for each day of the frost, which were marked upon diagrams, clearly showing the relative severity of the weather experienced in each district. The lowest readings were 15° at Garstang on the 16th, and 23° at Blackadder, 16° at Kelso, 15° at Stobo, 11° at Thirlestane Castle, and 10° at Melrose on the 17th. Reference was also made in detail to the rivers and lakes which had been frozen over and to other incidents, proving the remarkably low temperatures which had occurred. Some idea of the intensity of the frost may be gathered from the fact that in the south of Scotland the temperature fell below 10° on more than 11 occasions, below 20° on 10 occasions, and was below 32° on 25 to 29 occasions. In the London district readings below 10° occurred on 2 or 3 days, below 20° on 10 days, and below 32° on 20 days. In Ireland temperatures below 10° were registered on 6 or 7 occasions, below 20° on 12 or 14 occasions, and below 32° on 22 to 24 occasions. No place in the British Isles was exempt from the frost; even at Scilly the temperature was below 32° on 3 days, the lowest being 29° on two occasions. The winter seaside health resorts afforded no protection from the frost; at Penzance the temperature fell below 32° on 10 occasions, at Torquay on 11 occasions, and was below 20° on 6 occasions; at Ventnor it was below 32° on 19 occasions, and below 20° on 3 occasions; and at Bournemouth it was below 32° on 23 and below 20° on 10 occasions. The heavy falls of snow prevented the frost from penetrating far into the ground, but where the snow was cleared away the temperature of the soil fell considerably. A diagram was exhibited showing the mean temperature of January in the neighbourhood of London for each year from 1774 to 1881, from which it appeared that the low mean temperature of 31·6° for January had only been surpassed on two occasions, and that the three years 1879-81 have been very cold, the mean for this period being only 32·2°. There is no instance during the past 100 years of any three consecutive Januarys having so low a mean temperature.

DESQUAMATION AFTER SCARLATINA.

To the Editor of THE LANCET.

SIR,—While this subject is under discussion in your columns I should like to call attention to the effect belladonna seems to have upon the character of the desquamation. Having heard belladonna much vaunted as a prophylactic in scarlatina, I decided to try its value by giving it in small doses (quarter minim of the tincture every four hours) to four children in apparent health who were residing in the same house as a child suffering from scarlatina. The result was not satisfactory, in so far as it did not prevent them from taking the fever, for all of them had it one after the other, the last having taken the belladonna for over a week before the scarlatina rash appeared; but in each case I found that the desquamation was in fine branny scales, instead of the large flakes usually seen after scarlatina, and which were well seen in the case of the first child, who had not had any belladonna. This led me to try the drug in cases where the rash had already appeared, and in each case I have obtained the branny kind of desquamation. I have now treated over twenty cases, and in all I have had the same result, while a number of cases during the same epidemic untreated by belladonna have had the usual large flake peeling. I do not find this effect from the internal use of belladonna in scarlatina mentioned in any of the works on therapeutics I have consulted, although its distinct action upon the functions of the skin, as seen in its control over the sweating of phthisis, is now fully recognised.

As a prophylactic I may add that I have given it a fair trial, having in five years been twice in the thick of epidemics of scarlatina, and although in two or three cases I have thought it must have averted the infection, the other result has so often occurred that I am inclined to regard it of but little value for this purpose. I believe it to be beneficial in the fever itself, for those cases in which it has been administered have all made good recoveries, and in each the sore-throat has been specially slight.—I am, Sir, yours faithfully,

J. ALFRED MASTERS, L.R.C.P. Lond., &c.

Hednesford, Staffordshire, Feb. 22nd, 1881.

AS bearing upon the above question, *Septic Solvent* desires to direct attention to the value of acetic acid in scarlatina. He says he has for some years adopted the practice of sponging all his scarlet fever patients with the diluted acid (one part of the strong acid to five parts of hot water), commencing the application as soon as the nature of the illness was suspected, and repeating it three times a day until the establishment of convalescence. In no case where this treatment has been carried out had there been the slightest desquamation.

MORBIFIC ODOURS.

To the Editor of THE LANCET.

SIR,—We have had a serious outbreak of small-pox here, about twelve cases, four of whom died. In two of the cases I noticed the following phenomenon, of which I should be glad to have an explanation:—

T. M——, a labourer, was working in a brickfield when some rubbish was shot close behind him. He immediately complained how horribly the rubbish smelt, was violently sick, and felt so ill that he was compelled to give up work and go to bed. The same evening he had a rigor, and in a few days the small-pox eruption made its appearance. Subsequently he informed me that his perspiration smelt just like the rubbish that had made him sick. I, however, noticed no peculiarity in the smell.

J. B——, paperhanger, went into a room with a companion in which a small-pox patient had lain. He immediately complained of the dreadful smell, was very sick, went straight home to bed, and in due course the eruption appeared on him.

In neither case was the smell complained of noticed by the companions, who also escaped the disease. I am happy to say that both men did well. I remain, Sir, yours obediently,

ALFRED BERNARD, M.R.C.S.

Queen's-road, Upton-park, E., Feb. 28th, 1881.

Subscriber.—"Boston Medical and Surgical Journal," Nov. 11th, 1880.

L. M.—He cannot.

T. J. G.—Any qualified medical practitioner may be consulted in the case.

Dr. H. Kennedy (Dublin).—The book has been received, and will shortly be noticed.

COMPENSATION FOR RAILWAY INJURIES.

To the Editor of THE LANCET.

SIR,—A friend of mine was injured in a railway collision, and his condition was such that the company privately allowed him £415 out of a claim made for £500. The medical agent of the company who "settled" the matter with my friend saw his tottering condition, and, in spite of his protests, insisted that perfect recovery would result in two years at the utmost. My friend is now in an advanced state of locomotor ataxy, never having recovered his health since the accident in 1875. He has had regular explosions of the usual symptoms of spinal injury up to the recent continuous and, I fear, final stage of the confirmed disease. He was induced to sign a document absolving the Company from all further liability. This payment of £415 was at last made as the result of a threat of legal proceedings. The Company has lately been applied to for moderate further compensation during total disability, and has absolutely refused it without examination of the patient.

I wish to ask you and your readers if, 1st, the "document" will hold water in a court of law? and, 2nd, if any such cases have arisen in which a jury have adjudged adequate further compensation?

I am, Sir, yours, &c.,

Shepton Mallet, Feb. 28th, 1881. F. PORTER SMITH, M.B. Lond.

FOREIGN BODY IN THE INTESTINES.

To the Editor of THE LANCET.

SIR,—In THE LANCET of Feb. 12th Surgeon-Major O'Brien has reported the case of a soldier's son who had swallowed a pin. Will you allow me to mention the case of a youth who swallowed a needle in a similar way? In March, 1880, Mr. N——, a linendraper in this village, came to me in a great state of alarm, telling me his son, a boy about six years old, whilst playing with a needle placed it in his mouth, and by some means swallowed it. Of this they were certain, as he was seen to place it in his mouth, and it suddenly disappeared. The father was very anxious that I should supply him with some strong aperient, as he said, to work it through him, and was very much surprised when I advised him not on any account to give the child purgative medicines, but to give him principally dry food, keep him quiet, and well watch every motion for some days. This they did, and on the fourth day were rewarded by finding the needle pass entire, though of a somewhat altered appearance, it having become quite blackened during its voyage through the canal. I need not say the child recovered without a single bad symptom, but had the father given the strong dose I believe it would have terminated very differently.

I am, Sir, yours truly,

Shirley, Southampton, Feb. 17th, 1881. RICHARD J. CEBAR.

ACUTE RHEUMATISM AS A SEQUENCE OF TONSILLITIS.

To the Editor of THE LANCET.

SIR,—I was glad, amongst others, to see this subject brought forward by Dr. Fowler, as I believe it is not a generally known fact. Some time ago I had a case of tonsillitis in a young married woman, followed in the course of a few days by a severe and, as it eventually proved, a fatal case of acute rheumatism, seriously affecting the heart. The interval in my case, between the throat symptoms having passed away and the commencement of the rheumatism, was only about two or three days. I am, Sir, yours faithfully,

Feb. 9th, 1881. H. P. ILDERTON, L.R.C.P. Edin.

"THE APPLICATION OF WARMTH TO THE HEAD."

To the Editor of THE LANCET.

SIR,—I should have said that in cases of suspended animation, as from drowning, I would suggest applying considerable warmth to the head and likewise to the back of the neck and the spine, so far as to include the phrenic and all the respiratory nerves, and this with the view of either restoring circulation or relieving congestion and promoting the regeneration of nervous force at their origins, and in the brain and spinal cord. Proper warmth to the other parts of the body and other approved means of restoration to be used, of course, as well. I had not noticed this subject mentioned, and therefore I hoped to make a useful suggestion. I remain, Sir, your obedient servant,

Chilton-Polden, Feb. 1st, 1881. CHARLES YOUNG, M.R.C.S.

THE DETERMINATION OF SEX.

To the Editor of THE LANCET.

SIR,—The following case seems to me to have considerable interest in relation to this question, which is now under discussion:—A man, at present in the Sussex County Hospital, has only two phalanges on each of his forefingers. His mother had the same deformity. He has six brothers; the two eldest have no deformity, but the other four have. He has two sisters who have no deformity. Of his children, the eldest, a girl of thirteen, and the third, a girl of three and a half, have, like their father, only two phalanges; while the second, a boy of five, and the youngest, a boy of eight months, have the normal number.

I am, Sir, yours, &c.,

Brighton, Feb. 19th, 1881. JOHN C. UHTHOFF, M.D. Lond.

DEATH FROM CHLOROFORM.

To the Editor of THE LANCET.

SIR,—I beg to report a death from chloroform, which occurred at this hospital on Saturday, Feb. 19th. The following are the particulars of the case:—

J. W——, a cabman, aged fifty-five, but looking much younger, came to the hospital suffering from a dislocation of the left shoulder of two days' standing. Attempts to reduce it having failed, chloroform was given. During the administration the patient struggled a good deal, but no symptoms of danger appeared. Anæsthesia was produced in about three and a half or four minutes. The inhalation was then discontinued, and the dislocation reduced. Immediately afterwards the breathing became stertorous, the face congested, and the pulse suddenly stopped. Artificial respiration was kept up for half an hour, an enema of brandy given, and galvanism employed without effect. The post-mortem examination showed considerable fatty change in the heart, with some fibroid thickening of the valves, which, however, were all perfectly competent. The lungs and other organs were much congested, but healthy. The reports of the inquest which have appeared in the papers were, of course, much garbled, and in some points entirely opposed to the real facts. I may mention that the chloroform was given on a cone of flannel, and about two drachms were used.

I am, Sir, yours faithfully,

R. D. H. GWILLIM, M.R.C.S., House Surgeon.

St. Mary's Hospital, Paddington, March 1st, 1881.

Anxious Inquirer should consult a medical adviser.

Inquirer had better make application at the office of the association, St. John's-gate, Clerkenwell.

M.R.C.S.—We regret that we have not space to print the letter. The case is not an unusual one either in its nature or in its duration.

Abe should consult a surgeon.

Broad Arrow.—We think it would be advisable to wait until the effect of the new Warrant has been fairly tested.

Scrutator.—We must refer our correspondent to the General Medical Council.

Registered.—We should say that our correspondent is fully qualified.

VACCINE LYMPH.

To the Editor of THE LANCET.

SIR,—A great number of medical men apply to me for animal lymph from the Government Institution of Vaccine at Brussels. They are either not aware or may have forgotten that Mr. Ed. Darke, of 3, Hemming's-row, Charing-cross, London, W.C., is my only agent for the supply in the United Kingdom, and it is to him that all applications must be made. If you will have the kindness to insert this letter in the next number of your journal, it will be the means of saving fruitless trouble to many members of the profession.

I am, Sir, your obedient servant,

Brussels, Feb. 25th, 1881. DR. WARLOMONT.

N.B.—All orders must be transmitted before the Tuesday in each week. The price of the large tubes or points is two shillings each, and one shilling for the small ones; payment to be made by Post-office orders.

ECONOMY OF FUEL.

OUR contemporary, *Design and Work*, publishes a series of data from experiments made by Mr. A. Percy Smith, of the Temple Observatory, Rugby, which go to show that the use of gas for cooking in properly constructed apparatus is much more economical than the use of coal.

SALICYLATE OF CINCHONIDIA AND OF QUINIA.

To the Editor of THE LANCET.

SIR,—Dr. Hewan's interesting observations in THE LANCET of Saturday last concerning salicylate of quinine are likely to be confirmed by others, for in many cases salicylic acid and quinine seem both to be indicated, and excellent therapeutical results have been reported from the one and the other, while a combination has sometimes succeeded after the failure of either. Upon the introduction of salicin and salicylic acid for rheumatism I tried them alternately with quinine. At length salicylate of quinine was manufactured. Dr. Hewan and others who have found it so efficacious will no doubt welcome another salt which I beg now to introduce—viz., salicylate of cinchonidia. This less costly preparation is very efficacious. Five grains may be given every two, three, or four hours, or in chronic cases three or four times a day. In severe neuralgic and rheumatic pain ten grains or more as an initial dose may be given. I have sometimes found five grains produce "singing in the ears," lasting for several hours, "exactly like the quinine medicine." At other times several doses were given before this occurred. The salt contains nearly one-third of its weight of salicylic acid, and it is of course incompatible with iron; it is rather insoluble, and so the taste is less pronounced than that of quinine. It can be given in pills or in wafer-paper, or in suspension. I give the solid drug in the form of Wyeth's compressed tablets, a very convenient method for administering various remedies. The tablets can be swallowed like pills, and, on account of the insolubility of the cinchonidia salt, the bitter taste is not perceived. Of course, for any special purpose they could be crushed to powder, but this would scarcely ever be desired. In neuralgia and in chronic rheumatism salicylate of cinchonidia deserves further trial. I have not employed it in acute rheumatism, but there must be many cases in which it might replace with advantage other salicylates.

I am, Sir, yours, &c.,

Dean-street, Park-lane, W., Feb. 21st, 1881. PROSSER JAMES.

P.S.—Having mentioned Wyeth's tablets in the above, let me take the opportunity of adding that I suggested the compression of iodide and of bromide of potassium by the same process, and such tablets (five and ten grains) are now in the market. Of course, it is usually desirable to give these salts dissolved in a full quantity of fluid, but to travellers and other persons the compressed tablets will often prove specially convenient.

STRUCTURE OF THE ANAL MUCOUS MEMBRANE.

To the Editor of THE LANCET.

SIR,—In reference to this subject, I would beg leave to state that the late William E. Horner, Professor of Anatomy in the University of Pennsylvania, Philadelphia, was in the habit of demonstrating the existence of the pouches referred to in THE LANCET of Jan. 29th, 1881 (page 187), and of Feb. 3rd (page 216), to his class as long ago as 1833, when I was a member of his class, and are described in his work on general anatomy, published in 1833. The late Dr. Geo. W. Norris, of Philadelphia, operated upon me in 1854 for purulent discharge from the anus, dividing the pouches by a curved knife such as Mr. Clegg states is used by Mr. Bickerstath. The division of these pouches has long been practised by the surgeons of the United States.

I am, Sir, yours very respectfully,

Ferrara, Italy, Feb. 8th, 1881. MORRIS S. WICKERSHAM.

ERRATUM.—In our report of the meeting of the Clinical Society on the 11th ult., the question put by Dr. A. E. Longhurst in relation to Dr. Sutherland's paper was wrongly attributed to Dr. Robinson.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Buzzard, London; Dr. Pountney, Lytham; Mr. P. Miall; Mr. Gwillim, London; Mr. C. Lucas, London; Mr. Gabb, Bewdley; Mr. Barnard, London; Mr. MacCormac, London; Dr. Holden, Sudbury; Dr. Spencer, Bath; M. Berthier, Paris; Mr. Nunn, Bournemouth; Mr. A. B. Morris, Kurseong; Dr. Goyder; Dr. Lawrence, Montrose; Dr. F. W. Smith, Leamington; Dr. Filipowier, Warsaw; Mr. W. Wilson, Carlisle; Dr. F. P. Smith, Shepton Mallet; Dr. Dudfield, London; Dr. Coleman, Surbiton; Miss Jennings, Gellideg; Mr. F. Mason, Blackheath; Mr. Bernard, Upton; Mr. W. Wallis, London; Dr. J. M. Wilson; Dr. Cook, Manningtree; Messrs. Douglas and Mason, Edinburgh; Dr. Warlomont, Brussels; Dr. Longhurst, London; Dr. Creighton, Cambridge; Mr. Tacey, Bradford; Dr. G. W. Balfour, Edinburgh; Dr. Prosser James, London; Mr. Ash, Holsworthy; Mr. Fletcher; Mr. Sutton, Sittingbourne; Dr. Potter, London; Mr. Chitty, Ripon; Mr. Snowden, Philadelphia; Dr. Bruce Low, Helmsley; Mr. Sangster, Burra; Dr. Mackintosh, Chesterfield; Sir J. R. Cormack, Paris; Dr. Lucas, India; Messrs. Harvey and Reynolds, Leeds; Dr. Webb, York; Mr. Brown; Mr. Banks, Cheltenham; Mr. Hunt, Hull; Mrs. Bidwell, Buxton; Mr. Wilkinson, Stockport; Dr. Moinet, Edinburgh; Messrs. Putnam and Co., New York; Dr. Buchanan, Glasgow; Dr. Whitla, Belfast; Mr. Larmuth, Salford; Mr. Warren, Dulverton; Mr. Brett, Leicester; Dr. Robertson, London; Mr. F. R. Fisher, London; Dr. Fenton, Coventry; Mr. W. Haward, London; Mr. West, Birmingham; Mr. Rendle, London; Mr. Phelps, Ashford; Mr. Pocock, London; Junior; X. Z.; An Irish Practitioner; M.B., Bristol; F.R.C.S. Edin.; A General Practitioner; A Disgusted One; Scalper, Chesterfield; W., St. Helens; M. B., Bristol; Medicus; M.R.C.S.; The Director-General, Army Medical Department; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Smith, Epperstone; Mr. Holloway, Kidderminster; Dr. Nash, Aldershot; Dr. Marah, New Wandsworth; Mr. Spence, Banbury; Mr. Bogg, Altrincham; Mr. Chute, Port Elizabeth; Mr. Sharpe, Leeds; Miss Cunningham, Hemel Hempstead; Mr. Lodge, Sherbourne; Mr. Byrn, Weston-super-Mare; Mr. Green; Mr. Young, Bridgewater; Messrs. Lee and Martin, Birmingham; Mr. Slinger, Manchester; Mr. Martin, Evesham; Mr. Unsworth, Liverpool; Mr. Birtwhistle, Skipton-in-Craven; Mr. Stenning, Emsworth; Mr. Walker, Hanley; Mr. Holden, Liverpool; Messrs. Gravatt, London; Dr. Hitchman, Liverpool; Dr. Hutting, Liverpool; Messrs. J. and H. Grace, Bristol; Mr. Davis, Pentrepoth; Mr. W. Jackson, London; Mr. Kinder, Leicester; Dr. Bower; Mr. De Fraine, Aylesbury; Mr. Buckle, Great Bardfield; Mr. Palmer, Hackney; Mr. Griffin, Reading; Mr. Mollinhew, Upholland; Mr. Symonds, Melton Mowbray; Dr. Thomas, Wilmington, U.S.A.; Dr. Roberts, Nottingham; Mr. Henbrough, Walton; Dr. Corner, Poplar; Mr. Mann, Lee; Mrs. Chapman, Clapham; Mr. Mayne, Brompton; Medicus, Sheffield; Waters; F., Windermere; W. M., St. John's; Comos; H. C., Kettering; Medical; Medicus, Cheetham-hill; Medicus, Leeds; M.R.C.S., Norwich; Alpha, Derby; Medicus, Birchington; Richards; Expertus; M. E.; Assistant; M.R.C.S., Southampton; W. E., Sheffield; Georginia, Penrith; M.R.C.S., Woodhouse Junction; Alpha, Leicester; Delta, Longsight, Henricus; Medicus, Camberwell; Fidelis; M. W., Chislehurst; X.; Ebbw-vale; Alpha, Sheffield; Registrar, Bath; Dolta, Hackney; F. G., Oxford; E. H. A., Reading; Narkissor; Brompton; V. A. Y.; W. J. C.; &c., &c.

Hampshire Telegraph, Yorkshire Post, Il Morgagni Giornale, Civil and Military Gazette, The American, Marylebone Mercury, Western Daily Mercury, Journal of Applied Science, Estates Roll, Kronika Lekarska, Science Gossip, Cambrian News, Mansfield Reporter, Coffee Public-house News, Bradford Observer, Edinburgh Evening News, West London Observer, Kensington Reporter, Westminster News, &c., have been received.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year.....£1 12 6 | Six Months £0 16 3

TO CHINA AND INDIA ..... One Year, 1 16 10

TO THE COLONIES AND UNITED STATES .. Ditto, 1 14 8

Post Office Orders should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable at the Post Office, Charing-cross.

Notices of Births, Marriages, and Deaths are charged five shillings.

Cheques to be crossed "London and Westminster Bank."

ADVERTISING.

Books and Publications	£0	5	0
Official and General Announcements	0	5	0
Trade and Miscellaneous Advertisements	0	4	0
(Seven lines, each averaging ten words, or seventy words in all).			
Every additional Line	0	0	6
Front Page ... per Line	0	1	0
Quarter Page	1	10	0
Half a Page	2	15	0
An entire Page	5	5	0

The above Scale of Charges is arranged upon the basis of the classification adopted in the Index.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements (on page 2), which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed

Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom.

The postal arrangements relating to the distribution of THE LANCET will be considered from time to time in the interests of subscribers.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 67, Rue Caumartin, Paris.